

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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## Manufacturers' Record.

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BALTIMORE, OCTOBER 14, 1909.

The Sterling Improvement Co., Ltd., Duluth, Minn., which has been advertising Texas properties, in which it is engaged in developing, in the "Classified Opportunities" department of the MANUFACTURERS' RECORD, writes us:

Your publication is one of the best that we have ever advertised in, and is one of the best magazines that ever came to our office.

### GOOD ROADS PRIZES.

The winners in the competition offered by the MANUFACTURERS' RECORD for the best articles on improved highways for the South are:

Francis Joseph Kelly of Baltimore first prize, \$250.

Isaac Fisher, Pine Bluff, Ark., second prize, \$100.

W. T. Corwith, Charlotte, N. C., third prize, \$50.

The prize-winning articles coming closer than any of the others submitted in the competition to the conditions set forth in our issue of August 5 will be published as some of the features of our special Good Roads issue of October 28. A number of the articles submitted, while not coming within the range of the prizes, are of such excellence that they will be printed, some of them in that issue and others in subsequent issues in the MANUFACTURERS' RECORD. Be on the lookout for the special Good Roads issue October 28. It will be a great paper. Don't miss it.

### TO BUILD AUTOMOBILES SOUTH.

The development of the automobile industry has been more rapid than that of any other large industry in the history of the country. Though the South has been spending many millions of dollars in the purchase of automobiles, it has up to the present time made comparatively little progress in their manufacture. A Lexington (Ky.) factory is producing a car which has won very high commendation in automobile races, and now Birmingham comes to the front with the announcement of an automobile factory to be built at that place, the machinery for it having been, to a large extent, already secured. It is to be hoped that the Birmingham enterprise will be planned on a broad basis, and will be pushed with the vigor which the situation demands. The automobile has come to stay. Its use is increasing every day. What the South has done in the purchase of automobiles is small as compared with what it will do. It is, therefore, exceedingly important that the many millions of dollars which are to be expended in the purchase of automobiles shall, to as large an extent as possible, be kept at home. Birmingham sets a good example in establishing such an industry. What other city in the South will match it?

### THE SOUTH SHOULD UNITE FOR HIGH COTTON.

Unless all sources of information in regard to the cotton crop are thoroughly unreliable, the yield this year will be very short. Considering the rapid increase in the world's consumption of cotton even during such a period of depression as that of 1907-1908, it may be accepted almost without question that with the wonderful prosperity which is now coming upon this country and which from this country will spread more or less to all other lands there will be a very great increase in the consumption of cotton goods. The very general claim made by mill owners that higher prices will lessen consumption may prove a fallacy. Last year it was very difficult to find a market for 15,000,000 tons of pig iron when iron was selling on the basis of \$10 to \$11 in Birmingham. Now the market is consuming pig iron at the rate of 30,000,000 tons, though prices are on the basis of \$15 at Birmingham. With double the production of last year now going on, with prices at an advance of about 33 per cent., buyers are eager for iron which last year they were unwilling to accept at the lower prices and while production was just about one-half of what it is now. It is, therefore, not altogether safe for spinners to count on a reduced demand for cotton goods by reason of higher prices of the raw material. If general business revives commensurate with the revival in the iron trade, and it seems that this is absolutely certain, then the world will be ready to consume all the cotton goods that can be produced out of this year's crop, even though prices for the raw

material should rule higher than at present.

The English spinners, as usual, are playing a very shrewd game. Some years ago a leading cotton manufacturer in the South wrote to the MANUFACTURERS' RECORD that he was opposed to any invitation being extended the spinners of England to visit this country, because, said he, they are the ablest merchants in the world, and he was opposed to their gaining by personal study any knowledge of the cotton conditions in the South. He did not want them as competitors to any greater extent than they then were, and he was afraid that a visit to the South would enlarge their knowledge of cotton production and cotton manufacture in this section. The English spinners, however, are shrewd enough to thoroughly understand these conditions without a personal investigation. They and the spinners of the Continent are making a great outcry at present about the high price of cotton and are endeavoring to induce the cotton spinners of the world to curtail production in order to force down the market for the raw cotton, or to force up the market for cotton goods; but, while doing this, they are vigorously at work buying cotton as rapidly as it can be had. American mills, on the other hand, are limiting their purchases, hoping to secure lower prices.

Considering the decrease in the yield, prices which ordinarily might be counted as good, would this year be disastrous to Southern farmers as a whole. In some States, especially the Carolinas and Georgia, the crop is fairly large and the growers in these sections will be enriched by the high prices due to the shortage in the Southwest. Taking the situation as a whole, however, it ought to be the aim of cotton mill people of the South, as well as of every business man in this section, to do all in their power to secure for the benefit of the South a high range of prices. The policy which would attempt to force down the price of the raw staple is unwise from every point of view. So important is cotton in the trade relations of this country and in our financial relations with Europe that every industry in the country is benefited by the prosperity which flows from the prosperity of cotton growers; while many industries would be greatly hampered and their prosperity curtailed by low prices for cotton. The South has a practical monopoly of cotton. Nature has forced upon this section this year a very short crop. It is the South's opportunity, if not its duty, to unite in securing the utmost benefit of this monopoly and compel the world to pay a price commensurate with the world's needs for cotton goods and with the shortage in the crop. The cotton mill owner in the South who takes any other view of the situation is dealing with the problem from a narrow point of view, rather than from that of the best interest of all the people of the whole South.

### RAILROAD MISTAKES.

Notwithstanding the fact that Baltimore is the largest city of the South and more closely identified with Southern interests than any other community, it is, so far as the railroads are concerned, merely a way station. A correspondent, writing from Atlanta, in this issue, calls attention to a grievance which every traveler between Baltimore and the South has had to endure. None of the lines from this city to the South have a single sleeping-car berth on sale here. Every berth desired must be engaged through New York, the Baltimore agents of the Southern lines not having authority to make any reservations except after the long delay of wiring New York, which usually, in the case of a railroad reservation, takes about 12 hours or more. Against such treatment the traveling public has a right to protest, and certainly the city of Baltimore is justified in entering a very vigorous protest and insisting that a Pullman shall be assigned on every important train for reservation here.

The complaint of our correspondent is an illustration of many of the mistakes made by railroads for which there is no adequate excuse. It is to such mistakes as these, involving inconvenience and trouble on the part of the traveler, that much of the criticism of railroads is due. It looks as though railroad officers had not yet learned the lesson which sooner or later the public will absolutely compel them to learn. The wild craze against railroads which swept over the country a few years ago, as unjustified as it was, producing infinite harm to the railroads and to the people, would never have existed but for the foolish blunders of many railroad people.

### WISDOM FOR SECRETARIES OF SOUTHERN BUSINESS BODIES.

Men intelligently busy for their communities as secretaries of business bodies in Southern cities recognize the friendly spirit that dictated the editorial in the MANUFACTURERS' RECORD of October 7 on mistakes that commercial secretaries make. They know that the criticism comes from long experience in working with commercial bodies for the special benefit of individual cities and for the general advancement of the South. How their views coincide with ours is indicated by the following from a secretary of one of the liveliest bodies in the South:

Merely to express my approval of your editorial, in re commercial associations, State and sectional organizations and those in particular to which you referred in your editorial.

At the last meeting of the board of governors of the body I represent I had piled up for consideration nearly six inches of correspondence from these and kindred organizations.

I read one or two through, and they were disposed of in this manner:

Move it be filed.

Seconded.

Carried.

After the second one was read the governors asked that they only be read by title. In this manner we disposed of the entire batch

in 10 minutes. If we had seriously considered every proposition we would have voted away about \$300 of the funds of the association and in return would have been burdened with a certificate of membership and a lot of printed matter which no one reads.

These associations are a drain on the local commercial organizations. If the working secretary can influence the directors to allow him a junketing tour he takes a car ride, puts up at a good hotel, attends a banquet, is shown the city, applauds a few remarks, which he forgets immediately, and comes home and waits for a month or so before he springs another junketing tour on his people.

This board has turned down these propositions, and as long as I am secretary they will receive but little consideration. Our work lies in a different direction.

An interchange of pamphlets, literature, blanks, ideas, costs but a few cents postage, and a commercial secretary can get more real good out of a yearbook of any live organization than he could get by attending a commercial secretaries' congress every day in the year—and his head would feel better the morning after.

Now these are my sentiments.

I do not wish to pose as a paragon of any virtue, or to bring my association into a national controversy. I am writing this to assure you that you have struck the right keynote. Keep the tune going.

From Portsmouth, N. H., O. L. Frisbee, chairman of the Commercial Development Committee appointed by Mayor Edward H. Adams, writes:

I was pleased to read your article in your issue of October 7 on "Mistakes That Commercial Secretaries Make." If they will only heed it they will be a wiser lot of men. Some of these men remind me of the man in Stuart Robertson's old play, "The Henrietta," who comes on the stage and says: "I am a hell of a fellow when I ain't." If they will follow the teachings of your excellent paper they will learn that activity and talk will never take the place of business judgment. This comes from experience, which is only another way of saying that with age comes wisdom.

The secretary of the Southern body sizes up the situation admirably, and the New Hampshire man, writing from an absolutely disinterested standpoint, offers a part explanation of it. Mistakes made by some of the secretaries of Southern business bodies in giving their support and in misleading their bodies to give support to conventions, congresses and parliaments dubbed "Southern" are due primarily to a lack of acquaintance with the facts of the persistent attempts that have been made in the past fifteen or twenty years to hang upon the obvious and widely discussed business measures for Southern development many kinds of foolish schemes and some menacing the welfare of the South. Their enthusiasm has outrun their discretion. Their instincts of hospitality have blinded them to the possibility that hospitality might be abused. Such men are not of the class who, in the face of experience and knowledge, are found quickly to the front in giving countenance to some bolder spirit of their kind, whether to the manner born or utterly unknown to them before he looms with a galvanized ghost of a former failure or a glittering prospect of mutual advantage for all co-operators.

As our correspondent has truly suggested, these movements are a drain upon local commercial organizations. They tend to divert into infertile, wasteful channels time, energy and money that should and could be legitimately used in furthering the practical objects of local organizations. There is not a city or town of importance in the South which does not contain in its population wide-awake, progressive men anxious to contribute liberally to movements for the advantage of their communities. Their desires in that respect are suppressed when they see the organization, that should be the center-point for action of the right sort, turned

into a lobby for dreams and schemes of hazy origin, with no one benefited save the promoters.

Where there is a live and practical State organization, such as the Board of Trade of West Virginia or the Texas Commercial Secretaries' Association, local bodies will do well in participating. If they have the means at their disposal and the time that need not be devoted to strictly local endeavor. But the organization assuming to represent the whole South is a snare and a delusion, for any organization that is strictly business and must be occupied with things right at hand. That the "Southern" convention, congress or parliament has time and again had the support of men leading in all that tends to the upbuilding of their respective communities is no proof of the wisdom of the undertaking. Men successful in many lines of industry and trade have again and again made mistakes of judgment in dealing with propositions presented to them by some plausible fellow or other, but entirely removed from their wonted occupations. Their very interest in their section's welfare has generally been the key struck to bring them into the chorus of false notes. Their disinterested participation tends to bring their section into the position of a laughing stock among sober-minded men.

So, too, any local organization treating seriously the flood of circulars and correspondence which comes to them as long as the money for the promotion of the schemes is sufficient to pay the salary, the printing, the banquet and the postage accounts, by so much is it diverted unnecessarily from the real business that should occupy it. The action of the local body set forth in the correspondence quoted here ought to be amended. The first motion should be:

Move that the proposition be used to kindle the office fire.

#### AN EDUCATIONAL VISION.

The broad scope of the practical vision of the future of the University of Texas is indicated in the following from a letter of President S. E. Mezes to the MANUFACTURERS' RECORD:

General plans for instruction buildings, as distinguished from other buildings of the University of Texas, are being prepared for the institution by Prof. Frederick M. Mann of St. Louis. These plans are not yet completed and have not been approved by the Board of Regents, and it is difficult to estimate at present their probable cost. But the cost cannot fall far short, for the buildings indicated, namely, buildings for instruction purposes, of \$5,000,000. It is contemplated that many of these buildings will be erected at once or in the near future. The purpose is to avoid the erection of any buildings that would not appropriately fit in with the building plan to be adopted by the university. The material used will probably be the local yellow brick with white stone trimming, the style being early Italian, red tile roofs and broadly overhanging eaves. Most of the buildings will be two stories high with a generous basement, though some of them, where the ground lies especially low, will be three stories high. The buildings will be planned to accommodate from 9000 to 10,000 students. It is contemplated that the central feature of the group will be a library building, which will be comparatively ornate, and will, by its size and dignity, indicate the importance of a library in a modern university.

The faith in the future of the University of Texas epitomized in this matter-of-fact statement of plans for buildings to accommodate between 9000 and 10,000 students is amply justified by Texas facts. The University community now embraces about 2000 persons. It is the apex of the schools under the auspices of the State, for which ample provision was made by the far-seeing

founders of the State, and which has been since reinforced. The University is endowed with nearly 2,000,000 acres of land, which must increase in value every year as more and more the opportunities in Texas are recognized. The population of the State is now about 3,800,000, or less than an average of 15 persons to each of the 262,000 square miles of the land area of the State. When Texas has a population with a density equal to the average for the whole South it will have between 8,000,000 and 9,000,000 inhabitants, or when it has a density equal to that of Virginia, for instance, its population will number 13,000,000. Texans have already been born who will live to be among that 13,000,000 population, and that population should easily supply 10,000 students to the State University. It is, therefore, the part of practical wisdom to hold to the vision of President Mezes' plan, so that, as the base of the educational system of the State broadens, the apex may maintain its proper proportions.

#### RAILROAD REPORTS AND PROGRESS.

This is the season when most of the railroad companies publish their annual reports. The fiscal years of these lines end on June 30, and usually two or three months elapse before the data for the twelvemonth are digested and presented to the stockholders and the public. Those reports which have appeared generally show decided improvements in both gross and net earnings as compared with the reports made in the fall of 1908. In some cases the net exhibit is particularly good, because systematic economy has been practised with particular attention, so that while the gain in percentage of gross earnings may not seem so great as to excite special remark, the increase in net has been in such ratio as to merit hearty favorable comment. One of the reasons for this decrease in cost of operation was the devotion of much study and effort toward securing greater efficiency in every department affecting the conduct of the business of transportation. Thus cars and engines were made to give their fullest service with relation to traffic, while economies in fuel and other supplies have been secured without reduction of working efficiency. Officers and employees worked together to avoid waste of time and energy, so that all efforts would produce results either of profit or economy to the roads. Large savings were effected in comparison with recent past years, owing to lower prices for materials bought during or after the business depression. Coal, for instance, was at a much lower price than in 1906 and 1907, and iron products were based on iron costing on Birmingham basis \$11 to \$12 a ton, against \$15 to \$20 in 1907.

Notwithstanding these endeavors to attain a high degree of economic perfection, the companies do not seem to have lessened vigilance with respect to providing adequate equipment and for making extensions and improvements where needed in their respective territories. One company in particular has recently taken action to provide for building 500 miles in Texas, and others operating in the same State are maturing plans for extensions, which will doubtless be started early next spring if they are not begun sooner, for railroad construction is possible there much of the winter. Oklahoma would find the big companies doing more within her borders if her Legislature had not put some unwise laws upon the statute

books. Comment upon this condition in the new State is frankly made in one of the trunk line reports, and it is declared that the making of a contemplated railroad connection is rendered impossible by the objectionable legislation. Perhaps in time these laws will be either amended or abolished, but until there is change in the condition of her statutes, Oklahoma is likely to find the important railroad companies doing little in the way of extension within her limits.

Much construction of new lines is necessary, not only in Oklahoma, but in Texas, Louisiana, Arkansas and several other States, and it is obvious that the companies cannot command capital for extensions if investments are to receive hostile treatment by local Legislatures. There seems to be, especially in Oklahoma and Texas, a disposition among a portion of the population to consider railroads as oppressors, and to regard their every move with suspicion. To this mental attitude, perhaps, is due the antagonism exhibited by the law-making bodies when dealing with matters relating to transportation. How shortsighted is the pursuit of this policy is being realized by many of the progressive men in those sections, but until some change of sentiment is manifested by the lawmakers, the railroads fear to start new work, lest capital be not forthcoming, and also because further restrictive statutes of an oppressive nature may be made. Meanwhile development is halted; large sections of valuable land are not settled and put under cultivation, as they would be were the railroads made welcome, instead of being regarded with distrust. Such conditions cannot continue if the country is to advance and grow richer, so that the plainly apparent duty of all concerned is to work toward establishing harmonious relations between the transportation interests and the public. When these two elements understand and appreciate each other it will be impossible for others to push them apart, no matter what selfish consideration may prompt action toward setting them at odds. It is to be hoped that the people in the States affected will study the situation for themselves, and that railroad managers will realize that their people were guilty of many mistakes of sins of omission and commission, and by getting together on a friendly basis will speedily adjust matters, so that there will be no obstacle remaining in the road of progress.

#### THE RECORD HABIT.

Mr. G. C. Terry of Terry & Tice, Louisville, Ky., writes to the MANUFACTURERS' RECORD:

I beg to say that I wish you would put me down as one having the "MANUFACTURERS' RECORD habit" and that I am in sympathy with your every expression and movement for the good of the South. I believe there is no source from which comes so much for the upbuilding of our Southern country as the MANUFACTURERS' RECORD.

W. S. Goodwin of Goodwin & McIlhenny, lawyers, Warren, Ark., writes:

The MANUFACTURERS' RECORD I consider indispensable to every citizen who essays to keep abreast of the times, and its optimism should be an inspiration to all who read it.

This is only another illustration of the fact that the MANUFACTURERS' RECORD is equally as valuable to professional men, as well as to business men generally, as it is to manufacturers.

Mr. B. L. Craig, contracting engineer of the Canton Bridge Co., writing from Atlanta, Ga., says:

A few days ago we received a letter from the C. C. MacKee Company, manufacturers'



agents in the Orient, Hongkong, China, requesting us to quote them a price on a draw span. As the Atlanta office is only advertised in the MANUFACTURERS' RECORD, we believe it was through this medium we received this inquiry. We take pleasure in giving you this information, and congratulate you upon the extensive circulation of your paper.

Mr. H. Burns, secretary and treasurer Chamber of Commerce, Macon, Ga., in renewing his subscription, writes as follows:

You have done so much for the upbuilding of the South I cannot see why it is not in the hands of every social, fraternal, commercial or any organization within the border lines from the Potomac to the Rio Grande.

#### A LONG FURNACE RUN.

The accuracy of the statement made in correspondence from Florence, Ala., in last week's issue of the MANUFACTURERS' RECORD that the Hattie Ensley furnace of the Sloss-Sheffield Steel & Iron Co. would probably shortly blow out, after having been in blast continuously for about six years, has been questioned because of the unusual length of time for any furnace to be in continuous operation without relining. Replying to an inquiry in regard to the matter, Mr. J. W. McQueen, the vice-president of the Sloss-Sheffield Company, writes that the Hattie Ensley furnace had been "in blast five years last July, but is still making a phenomenal record, the output averaging considerably over 200 tons a day."

#### ENLARGING ALABAMA'S STEEL OUTPUT.

The Tennessee Coal, Iron & Railroad Co., in carrying out the plan for continued improvements, advises the MANUFACTURERS' RECORD that two new open-hearth furnaces of 100 tons capacity each will be added to its Ensley steel plant.

This is but another illustration of the extent of the operations of this company, and an intimation of the very great future that is evidently its destiny.

B. A. Colonna, 140 B street N. E., Washington, D. C., writes to the MANUFACTURERS' RECORD:

It has now been about five years since I retired from active life as a civil engineer, yet I take pride in the MANUFACTURERS' RECORD and appreciate the great public service it is rendering.

#### ACRES OF DAHLIAS.

"Acres of Diamonds"—no, not acres of diamonds, but 40 acres of dahlias, varied and magnificent in color, form and size; small and large spheres; tender and dainty wind-blown singles; 40 acres of the autumnal beauties; 400 or more varieties spread out in splendid coloring amidst the harmonizing greenness of the encircling land. This more than beautiful display could have been seen any day last week by anyone who cared to visit the Vincent wonderland of dahlias and other flowers near Cowenton, about 15 miles from Baltimore.

Thirty-seven years ago the elder Vincent settled at that point, now known as White Marsh. He was an English immigrant. So dreary was the spot that his wife said: "You are here, and so I will stay; but surely it is a God-forsaken country." On the dreary spot Mr. Vincent and his sons have proven the power of vigor and industry and knowledge. The land of desolation has become the land of dahlias. Mr. Vincent said to a visitor: "Someone else may own more dollars than any other man in the world, but I own more dahlias." On this 200-acre farm, given almost wholly to flowers, mainly dahlias, chrys-

anthemums and geraniums—for Mr. Vincent believes in specializing—some vegetables for propagation elsewhere are raised, but dahlias, dahlias everywhere; dahlias of beauty never seen before; dahlias of every hue and of 400 varieties attest man's ability to achieve. There are six great greenhouses, covering an aggregate of four acres, and an electric-lighting plant and a great heating system using a ton of coal an hour in severe weather. The founder of the present firm of Vincent & Son has indeed made his several blades of grass to grow where none grew before; the "grass of the fields," these special brightly blooming blades which he has chosen to care for and develop and to spread over the world in filling orders that come from everywhere.

What Mr. Vincent has wrought is worthy of study. One man becomes a railroad king; one an ironmaster; one a great financier; one, as in Vincent's case, a king of dahlia-growers, and in each case, back of the man as seen by the public, is the tireless worker, with initiative, with the power of self-denial, with something in him—not luck—that commands success.

There are hundreds of places in the South where Vincent's work ought to be duplicated; if not in dahlias, then in other flowers, and where dreary wastes could be made as beautiful as White Marsh, and where, in the making, wealth could be created. "Every dollar invested here," said Mr. Vincent, "has been literally dug out of the ground here." The same thing can be done in many other places in the South.

#### FOLLIES OF 1909.

To enlarge the scope of the membership of the "National Council of Commerce," so that it will "truly represent and be the voice of commercial America," is the object of a meeting next week between Gustav Schwab, inventor of the thing, and Secretary Nagel of the National Department of Commerce and Labor. Secretary Nagel is so new on his job at Washington that he is probably unaware that the "National Council of Commerce" is just as likely to represent truly and be the voice of commercial America as the "Southern Commercial Congress," over which Secretary Nagel has consented to preside in December, is likely to represent and be the voice of the business mind of the South. How representative the "Southern Commercial Congress" is of the South after a year's wild aviation is suggested by the statement to the Louisiana Commercial Secretaries' Association by one of the leading promoters of the "Congress" that of all the commercial organizations of Louisiana, but one is allied to the Southern Commercial Congress, and that one the body of which he is secretary. 'Nuf said.

#### THE COTTON MOVEMENT.

In his report for October 8 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 38 days of the present season was 1,989,172 bales, an increase over the same period last year of 195,755 bales. The exports were 984,242 bales, an increase of 161,908 bales. The takings were, by Northern spinners, 135,990 bales, a decrease of 41,385 bales; by Southern spinners, 244,757 bales, an increase of 28,228 bales.

The League of Virginia Municipalities, in session last week at Staunton, elected Charles E. Ashburner, president, and L. C. Branson of Portsmouth, secretary and treasurer.

New industries started and additions to existing plants since the first of this year in South Carolina represent \$17,000,000 of capital.

## Foreign Spinners' Shrewd Game Against the South

By ATWOOD VIOLETT.

[Written for the Manufacturers' Record.]

I beg to acknowledge your telegram of even date, reading as follows:

"Are not foreign spinners buying cotton heavily, while American spinners are holding off, hoping for lower prices? Please write me fully for publication or for my own information your views on the situation."

It has seemed to me that the short-time movement, either already inaugurated or about to be in this country, following the movement of a similar character in Great Britain and on the Continent during the past summer, has been a mistake, in view of the shortness, and probably extreme shortness, of the cotton crop, and the surprise has been all the greater that the Southern mills should have participated in this movement, considering how closely in touch with the situation in the cotton-producing States they are. In other words, it naturally would have followed with a continual deterioration in the crop during the past three or four months, that the Southern cotton mills would have availed themselves of this knowledge and protected themselves by buying contracts at prices then ruling, at some three or four cents lower than now, and while this may have been done to a very moderate extent, it was done, apparently, in few instances only, because of their participation in the effort to bring about a reduction of working hours for their respective mills, jointly with a similar movement among the New England mills.

The exports since September 1 show that while foreign spinners have been doing a good deal of talking and threatening, they have lost no time in buying cotton as rapidly as the movement to the small and large interior towns permitted, and apparently they have had it moved to the ports as fast as freight cars could carry it.

The query arises, whether while abusing speculation for putting the market up, the foreigner has not been quietly picking up all he could get his hands on, and having bought at much lower prices than now, he will be able to establish a very good average when paying present or even higher prices, which latter, in my opinion, are to materialize through this present season, while at the same time the abuse of the speculator was the burden of the song of the New England spinner, but he did not follow in the footsteps, in the above respects, of his foreign brother.

With a yield of say 11,250,000 bales, which many claim will soon generally become a maximum estimate (against 13,800,000 bales last season), the port receipts were on the 8th inst., according to the *Financial Chronicle*, 1,513,128 bales, against 1,364,070 last year, and the receipts at the 33 interior towns, constituting interior visible supply of cotton in this country, show receipts of 1,032,499 bales, against 1,019,814 last year. But as the stocks at the interior towns on the same date were 321,709 bales, against 368,156 last year, it shows that the cotton has moved out, as I said before, just as fast as it has come in, and therefore the port receipts, being so much larger than last year, is a bull argument instead of a bear one, indicating, as it does, the extent of mill requirements as quite 80 per cent. of the movement at the ports is cotton for export, or on its way to New England mills, but mostly the former. In other words, cotton does not leave the interior

until it has been sold. Otherwise, to consign it to the ports and pay new storage and other charges would be poor business.

Cotton for New England mills goes mostly overland, and this overland to the mills since September 1 has been 15,083 bales, against 36,778 last year.

How much has gone to New England mills from the Gulf and Atlantic ports via New York, Boston, etc., the *Chronicle* does not show, but the figures given for Northern spinners' takings since September 1 are 148,874 bales, against 175,158 last year, showing very clearly that even with takings of 27,000 bales less than last year for the same period, a very large amount of what they have taken in the past five or six weeks has been of cotton brought over from last season, and therefore showing that they are not at all replenishing supplies in keeping with their consumption.

Then we come to Southern consumption. Mr. Hester of the New Orleans Cotton Exchange and the New York *Financial Chronicle* and the New York Cotton Exchange assume that so much is being consumed each week by Southern mills, and it is put down by the New York *Financial Chronicle* at 52,000 bales, against 43,000 last year, although it is known that Southern mills have not consumed any such quantity of cotton, because that would mean they had that much cotton to consume, whereas the very short-time movement that they are now advocating indicates that they are sparingly supplied with the staple.

Southern consumption from September 1 to October 8 is given by the *Chronicle* at 286,000 bales, against 225,000 last year, and therefore, for reasons stated, a false assumption, but one made also by the two other authorities already referred to.

I have shown that the port receipts to the 8th inst. were 149,000 bales more than last year, but the exports to Great Britain and the Continent have been up to the same date 104,000 bales more than last year, or within 45,000 bales of the excess of receipts at the ports, again showing how the foreigner has taken the cotton and is getting it on his side of the water as fast as rail and ship transportation can carry it there.

Now, if we take the cotton on shipboard at the United States ports we find the same state of anxiety by the foreigner, as on the 8th inst. the amount awaiting clearance was 185,802 bales, against 198,584 bales last year.

Unfortunately for them, the mill people are looking at the cotton situation from the wrong point of view; that is, they are blaming speculation, whereas they should put the burden of their troubles upon Nature. The plant has not produced anything like a normal yield, and a great many anticipated these conditions even last summer and bought contracts to a very large extent in the aggregate, and very many of these purchases are still being held. There may be, therefore, some congestion in the contract market because of the strength of this long interest, but there is no congestion in the spot situation, because the movement of the crop, according to the figures I have quoted from the authorities mentioned, shows to the contrary, and if the crop is anything so moderate in size as the cotton world is gradually believing is to be realized, then scarcity of bales, instead of congestion, will confront the cotton spinner on both sides of the Atlantic Ocean for many months to come.

New York, October 11.

## SUCCESS IN A DRY YEAR.

## Quanah the Center of a Prosperous Territory.

[Special Cor. Manufacturers' Record.]  
Quanah, Tex., September 30.

Hardeman county, of which Quanah is the county-seat, is situated just north of latitude 34 north and just east of longitude 100 west, and in the southeast corner of the Texas Panhandle. For many years it was a part of the great cattle range of the Southwest, including the Oklahoma grazing lands, and many thousand cattle ranged its plains. But that has all been changed within the last six to eight or ten years, and now, where herds of long-horned cattle once roamed at will, may be seen homes of thrifty and prosperous farmers. Those farmers come from every point of the compass, and what I have said in former letter about the character of people who make up the population of Central West Texas applies with equal force to the farmers of Hardeman county; that is, they are made up of the most intelligent, the most enterprising and progressive people of the United States. No better evidence of this truth could be found than the great success to be seen on every hand. Though 1909 is called a dry year all over the Southwest, yet these farmers have good crops of almost everything they grow. Corn here is above the average yield of Texas farms; the same may be said of cotton, while Kaffir corn and milo-maize is yielding heavy crops.

These facts are mentioned to give the reader an idea of the basis of prosperity of towns in this part of the State. As corroborative evidence, as the lawyer would call it, of the above statements, the records of Hardeman county show that within the two years ending June 30 last the population had increased from about 10,000 to 17,000, while the assessed valuation had increased from \$3,725,190 to \$8,569,960, or more than 50 per cent. per annum.

Near the town of Quanah is situated one of the most valuable farms in the Southwest. It is the property of the Hardeman County Irrigation Co., and consists of 10,000 acres of the finest agricultural lands to be found in this section. Among crops grown on this big Texas farm this year were 30,000 bushels of corn, which have already been sold for \$20,000; 9000 tons of alfalfa hay, valued at \$135,000. I am told that this company intends to increase its alfalfa acreage to 5000 acres and expects to harvest 30,000 tons annually, which at present market prices would bring \$450,000 for this one crop alone. This magnificent property represents an investment of over \$500,000.

Quanah, the county-seat of Hardeman county, is fully abreast of her rural surroundings. Two years ago she had a population of less than 3500; today nearly 6000. Two years ago the assessed valuation of the town was \$987,840; today it is \$1,775,000.

As a jobbing and wholesale center Quanah is most advantageously situated. She is 190 miles from Fort Worth, 186 miles from Oklahoma City and 144 from Amarillo, the three principal competing wholesale towns. With such a vast tributary territory this should easily become an important trade center. Two wholesale grocery houses are already located here and are doing a business of over \$2,000,000 annually. There is also one wholesale dry goods house here doing a large business. A wholesale hardware and a wholesale drug house would each find this a fine field for operation.

There are also a number of industrial enterprises here, all of which are doing well. Probably the most important of these are the three great cement plaster mills, having a combined daily capacity

of over 1000 tons. One of these plants, the Acme Company, furnished 9000 carloads of cement plaster to the St. Louis Exposition in 1902 and 1903. Allowing 30 tons to the car, that would make 270,000 tons, and if divided into trains of 40 cars each and strung out in one unbroken line would reach over 70 miles. These three great plants employ approximately 1000 men and many teams, and their annual payroll is very near \$500,000.

There are some 60 retail business establishments in Quanah, doing an annual business of a little over \$2,500,000.

Other industrial enterprises here are an \$80,000 cottonseed-oil mill; a cotton compress; a 100-barrel flour mill; a 25-ton ice plant; two grain elevators; three modern cotton gins; five lumber companies, doing an annual business of over \$1,000,000; an overall factory; iron foundry; steam laundry; a \$7000 creamery; \$25,000 cold-storage plant; a \$30,000 alfalfa mill; local and long-distance telephone exchange; a mattress factory and a cigar factory. There is also a fine water-works system, and expect to have a sewerage system in the near future. The courthouse in Quanah is a beautiful structure, costing \$75,000. Two fine school buildings cost \$32,000. A passenger depot, to cost \$30,000, is now in course of building.

During 1908 nearly 2000 cars of merchandise were received at Quanah and 2750 carloads were shipped out.

Three railroads now enter Quanah, with two others building.

Another evidence of the importance of this town is found in the fact that over 30,000 pounds of mail matter was handled at the postoffice here during the fiscal year ended June 30, 1908, and about 45,000 pounds for the fiscal year ended June 30, 1909.

Climatic conditions are decidedly favorable to the building of an important business center. At an altitude of 1600 feet, with a mean temperature of 74 degrees in summer and 36 degrees in winter; an annual rainfall of about 30 inches; a good natural drainage, there is no possibility of the accumulation of pools of water to become sources of malaria or mosquito breedings, and therefore this locality must be healthy. The air is dry, pure and invigorating, and during the hottest period of the year there is always a cooling breeze during the nights, which insures refreshing sleep and thus restores exhausted vitality of the preceding day. As little as one may think of it, that is an important thing in the life of busy men. It is a condition that can never be found in our great cities, especially along the Atlantic seaboard, where the forests of skyscrapers shut out every breath of pure, fresh air.

There are other features which I would be glad to describe about this town and the surrounding country if space would permit. It may not be amiss to mention the fact of the rapid building of homes within the corporate limits of the town. I am informed that over 250 dwellings have been erected here within the last 12 months, and the building of others is going steadily on. Of these, many are quite handsome buildings. Quite a number were pointed out to me which were said to cost \$10,000 and over. Besides, there are some 25 or more very substantial business houses built here within the past 12 months.

In conclusion, I desire to say that all the evidences of this wonderful industrial progress is not wholly due to either location or natural resources. But an important factor in this work is a live commercial organization, the Quanah Chamber of Commerce, of which Porter A. Whaley is the secretary. Mr. Whaley is one of the many live, active young

men who are really doing great things toward building up Texas along commercial and industrial lines, and like many others, he has the hearty support of a strong and progressive class of business men. These men have blotted the word "can't" out of their dictionaries and substituted "I will" for it.

WM. C. CLOYD.

## FOR MUNICIPAL IMPROVEMENTS.

## Little Rock Preparing for the American Society's Convention.

The general committee of business men of Little Rock, Ark., preparing for the annual meeting in that city November 9 and 11 of the American Society of Municipal Improvements consists of Messrs. E. A. Kingsley, chairman; S. J. Storthz, R. C. Warren, D. A. Hegarty, E. C. Beach, S. A. Stearns, W. M. Kavanaugh, Mord Roberts, W. M. Whittenton, M. M. Richey, H. L. Rummel, R. C. Powers, Frank B. Gregg, James Aranson, George R. Brown, P. K. Baker, P. C. Ewing, W. W. Dickinson, W. F. Reichardt, George W. Rogers, Fred. I. Brown, A. M. Land, E. C. Wehrfritz, C. D. Goldthwaite, George R. Mann, Frank B. Gibb, J. M. Whitehead, Charles L. Thompson and John H. Touhey.

The officers of the society are Messrs. James Owen, president, Montclair, N. J.; Julian Kendrick, Birmingham, Ala.; Fred. Giddings, Atchison, Kans., and E. A. Kingsley, Little Rock, Ark., vice-presidents; A. Prescott Folwell, New York, N. Y., secretary; E. S. Rankin, Newark, N. J., treasurer. The officers of the society, together with the past presidents who have retained their continuous membership, constitute the executive committee. The past presidents are Messrs. M. J. Murphy, St. Louis, Mo.; George H. Benzenberg, Milwaukee, Wis.; August Hermann, Cincinnati, O.; Harrison Van Dyne, Newark, N. J.; Nelson P. Lewis, Brooklyn, N. Y.; A. D. Thompson, Peoria, Ill.; Robert E. McMath, St. Louis, Mo.; E. A. Fisher, Rochester, N. Y.; C. H. Rust, Toronto, Canada; George M. Ballard (deceased), Newark, N. J.; A. Prescott Folwell, New York, N. Y.; Charles C. Brown, Indianapolis, Ind.; Morris R. Sherrard, Newark, N. J., and George W. Tillson, New York, N. Y.

In a statement of the aims of the society Secretary Folwell says:

"This society, which is now about 14 years old, aims to afford information and other assistance to all who serve municipalities as officials, advisory experts, contractors or dealers in materials used by municipalities, doing this by means of papers and discussions, mutual intercourse at meetings, display of municipal materials and by a clearing-house of municipal information. The field which its activities embraces may best be indicated by a list of the titles of the committees, which include the subjects of street paving, street lighting, sewerage and sanitation, water-works and water supply, disposal of garbage and street cleaning, fire protection, park development and maintenance, taxation and assessment, city government and legislation, municipal franchises, municipal data and statistics. The papers presented and discussions held upon these subjects are generally conceded to have been the best which any society covering a field at all similar to this one has furnished its members and the public through its publications. That this is so may be seen by an inspection of the list of titles of these papers and of their authors. The value of these and of the discussions upon them is largely due to the fact that this society numbers among its members a large percentage of the country's foremost experts on municipal subjects. It is probable, however, that it is the officials of the cities of the second class or smaller who

derive the most benefit from the society, and to whom it therefore offers the greatest inducements. In order that the various subjects of interest to municipalities may receive adequate recognition and attention, a committee is annually appointed for each of the subjects mentioned above, and it is the duty of these committees to keep themselves informed upon the work being carried on and the improvements being made in their respective departments throughout the country and report the same at each annual meeting; also to obtain papers from other members dealing with subjects in their respective fields. It is, of course, the policy to place on these committees experts in the subjects covered, and their reports, therefore, bear to a large extent the stamp of authority."

## For a Tidewater Railroad.

Editor Manufacturers' Record:

I have thought much of the possibilities of a railroad through Tidewater Virginia from Newport News north to, say, Pope's Creek, Md., where the Pennsylvania Railroad has a branch line. I note that there are about 11 or 12 counties without a railroad that have a population of upward of 200,000. It is said to be a rich agricultural section. Newport News and Hampton have the finest water-front in the South. With another railroad connecting it with Northern manufacturing centers, the north side of Hampton Roads will become a factor in the great shipping business. There are about 40,000 persons here, but practically only one great manufacturing plant. With the opening of another railroad other manufacturing concerns are bound to come, and within the next decade Newport News and Hampton would have close to 75,000 population. The opening of a road across the tidewater counties of Virginia will bring about better conditions in this section and will shorten by 75 miles the rail distance between Newport News and Baltimore and the North. There are three roads entering Baltimore that could take advantage of this opening to the sea—the Baltimore & Ohio, the Pennsylvania and the Western Maryland. THOMAS R. MECHEN, Newport News, Va.

## To Get the Best from Land.

Mrs. E. M. Cox of Macon, Ga., writes to the MANUFACTURERS' RECORD:

"I was much interested in the article on page 41 of your issue of September 30 entitled 'Small Acres—Large Profits,' and beg to inquire if you cannot arrange to tell your readers how such results were obtained, also the local conditions, etc. I am sure all the practical information on the subject you can furnish will be appreciated by many others of your readers as well as by myself. I have a small farm of about 40 acres about five miles and a half from Macon. The land is part hilly and part level; soil sandy, with clay subsoil, and would like to get all the information I can to cultivate it so as to get the best results. The place is well watered. We are troubled a great deal by ants and other insects usually found in sandy countries. If you can tell me where I can get information that will be of value to me in connection with the matter I will appreciate it very much."

## 1909 Crop Estimates.

The Bureau of Statistics of the National Department of Agriculture makes the following estimate of production in 1909 of leading crops in comparison with production in two preceding years:

Crops.	1909.	1908.	1907.
Wheat, bus....	724,768,000	664,602,000	624,987,000
Oats, bus....	983,618,000	897,156,000	754,445,000
Barley, bus....	164,636,000	166,756,000	153,597,000
Rye, bus....	31,066,000	31,851,000	31,566,000
Hay, tons....	64,166,000	70,798,000	63,977,000



## More Enlargement by Tennessee Company.

### An Automobile Factory to Be Added to the Industries of Birmingham.

[Special Correspondence Manufacturers' Record.]

Birmingham, Ala., October 11.

Scattering sales of pig iron are being made by the several interests for prompt shipment, and one of the large producers has sold during the past week an aggregate of 1500 tons at \$15 per ton, 2 foundry basis, for first quarter of 1910. Admission of small sales, for prompt shipment, has been made at a slight concession; but this in no way correctly represents the market when you consider the fact that several buyers have sent in orders to be filled, specifying \$15 per ton at the furnace, 2 foundry basis. Stocks on the yards continue comparatively low in the face of the fact that within the past three or four months seven additional stacks have been blown in. Warrant and merchant iron show a material reduction in tonnage, as compared with the past 30 days. A large dealer reports recent sales to the extent of 1000 tons for first quarter delivery at \$15 per ton at the furnace, 2 foundry basis. Low grade iron is very much in demand, and still commands a premium. The railroads are alive to the car situation, and are apparently exerting their best efforts to prevent any serious setback to the manufacturers, both as to handling their raw material and pig-iron shipments. By those well informed it is estimated that there are no idle cars in the district. This, of course, means that equipment must be handled with all possible dispatch by consignors as well as consignees, in order to prevent a shortage. Charcoal iron is being quoted and sold at \$21 per ton at the furnace.

There has not been a sympathetic rise in the price of cast-iron pipe commensurate with that of the raw pig, but manufacturers look at the situation from the standpoint that it will only be a question of time until such advance must take place. Inquiries continue good, and small lots are sold from time to time. There is no reported curtailment of the product; but, on the other hand, full time is being put in. At present quotations are as follows (f. o. b. cars at the factory): Four-inch, \$25; 6, 8 and 10 inch, \$23; 12-inch and over, \$22 average, with a dollar advance for gas pipe. Fittings are quoted at \$55 per ton.

Something like 7000 tons of scrap changed hands the past week, and the feature of the market is the exceptionally good demand at a high level, for No. 1 machinery scrap. One large dealer reports a firm offer for a good round lot at \$12.50 per ton, Birmingham. The offer was rejected and \$13 per ton here demanded. It will be observed that this price is only \$1.50 per ton under the price of regular 4 foundry iron, considering 2 foundry basis. This accentuates the sharp demand for low grade iron. Wrought scrap also is active. Following are prices quoted:

Old iron axles, \$19 to \$19.50.  
Old iron rails, \$16.50 to \$17.  
Old steel axles, \$17 to \$17.50.  
No. 1 railroad wrought, \$13.50 to \$14.  
No. 2 railroad wrought, \$11.50 to \$12.  
Dealers' mixed, \$11 to \$11.50.  
Old steel rails, \$12 to \$12.50.  
No. 1 machinery, \$12 to \$12.50.  
No. 1 steel, \$12 to \$12.50.  
Old standard car wheels, \$13.50 to \$14.  
Light castings, stove plates, \$9.50 to \$10.  
Cast borings, \$6 to \$6.50.  
The management of the Tennessee Com-

pany advises that space is being prepared at Ensley for the erection of two additional 100-ton open hearth furnaces. This move is in keeping with the long list of improvements contemplated by the company in this district. Work at present has been temporarily suspended on the improvements at the old puddling mill site at Bessemer, where rail accessories are eventually to be manufactured, the surplus steel product, which was intended for this purpose, being utilized in other departments. Ninety-seven coke ovens have been put in commission at Blocton, and 260 additional ones are being repaired for service as soon as work is completed on same. Vats are being put in at several convenient points for the purpose of crescenting timber for use by the company. Pig iron production at the different furnaces of the company is holding up well, and indications point to a new record in that line.

A plant for the manufacture of automobiles is to be added to Birmingham's long list of manufactories, and is to be financed by local parties. A site has been decided upon for the plant, which is within ten or twelve blocks of the heart of

the business district. E. F. Ensley, Jr., will be president; Ike Adler, vice-president; J. D. Kaiser, secretary and treasurer. The equipment has all been purchased, the bulk of same being placed with Mr. M. E. Dewstoe of this city, who is acting as direct representative of a large number of well-known machine tool builders. Practically all of the machines ordered are of a more or less special nature, a number of them having been designed with especial reference to the manufacture of automobiles; for instance, the Landis crank grinder, the Heald cylinder grinder and the Lodge & Shipley crankshaft lathe.

The Lodge & Shipley Marvel lathe will be used for machining the transmission shafts, etc. All the machinery will be first class in every respect, and represents the most advanced practice in machine tool construction. By installing the latest improved machinery, the company expects to be able to materially cut down the cost of machining, etc.

The Trussville furnace of the Southern Iron & Steel Company will go in blast Monday or Tuesday of this week. This is the first furnace of the company to go in, and the Chattanooga furnace is expected to follow reasonably soon. Mr. A. H. Carpenter, who is well-known in the district and the iron world generally, has been appointed manager of sales for the company, with headquarters in the Brown-Marx Building, Birmingham, Ala.

## CHESAPEAKE & OHIO TO SPEND VAST SUMS FOR ADDITIONS TO EQUIPMENT

[Special Correspondence Manufacturers' Record.]

New York, October 12.

On the very highest authority I can state that the Chesapeake & Ohio Railroad Co. is about to make vast expenditures for equipment, both rolling stock and floating stock, and for improvements and betterments to its railroad. This information comes to me from Edwin Hawley and from President Stevens of the Chesapeake & Ohio Company. Mr. Stevens has been here for some days in conference with Hawley and the big men associated with him, and between them a plan has been worked out to supply the immediate needs of the company and provide for the immense increase in business which will soon be offered. One of the matters discussed at the meetings was the advisability of forming a holding company, something on the plan of the Pennsylvania Company, so as to consolidate the Hawley interests. Another was the impending deal with the Kansas City, Mexico & Orient Company. Still another had to do with certain negotiations regarding the Clinchfield, Carolina & Ohio Railroad, the exact nature of which I have not been able to learn.

But the matter of prime importance, the one which occupied most of the deliberations of these men, was the dissatisfaction of shippers with the service they have been receiving. A high official of the company admitted to me that there was good ground for dissatisfaction, but he placed the blame upon the previous owners of the road, the Vanderbilt crowd. I have heard from a man who is as near to the Vanderbilts as any living person can be, and who is also a close friend of Mr. Stevens, that the latter gentleman—one of the very best American railroad managers, by the way—was hampered in his ambition to make the Chesapeake & Ohio a great trunk line by the timidity of these same Vanderbilts and was prevented from throwing up his job by Edwin Hawley's entrance into the field. The purpose of Mr. Hawley and of the interests he represents is to make the Chesapeake & Ohio the great trunk line

and Newport News the great distributing port for the commerce of the nation. Immense sums of money are to be expended in the erection of grain elevators and warehouses, in double-tracking the more important lines of the system, and especially in improving and enlarging the terminal facilities.

W. J. MEANY.

Mr. C. E. Doyle, Richmond, Va., vice-president and general manager of the Chesapeake & Ohio Railway, informs the MANUFACTURERS' RECORD that there are now being built for his company 4000 50-ton hopper-bottom gondolas, as follows: By the Standard Steel Car Co., 2000; by the Pressed Steel Car Co., 1000, and by the American Car & Foundry Co., 1000, and that the Standard Steel Car Co. has an order for four steel passenger cars and four steel combination, baggage and passenger cars. These orders were evidently given before the making of the plans mentioned in the correspondence from New York.

### Farmers Doing Own Drainage.

[Special Cor. Manufacturers' Record.]

Raleigh, N. C., October 8.

The most extensive and costly inland drainage scheme west of Newbern began this week, when a dredge began work in Catawba county to cut a channel to drain the swamps on Clark's Creek. The people raised money by assessment, under a special act of the Legislature, and have built a dredge 16 feet wide and 60 feet long, which has been equipped with the proper machinery and is cutting a channel 9 feet deep and from 10 to 18 feet wide. The work will go on day and night, and electric plant having been installed. The farmers living along this stream, where 30 years ago there were thousands of acres of the richest bottom land in that section, are doing this work themselves, and estimate that it can be finished in 12 months, working 24 hours a day, and that the cost will not exceed \$7.50 an acre. The dredge

and its equipment weigh 78 tons, and three men operate it. It takes out two cubic yards of earth each minute and removes all trees and stumps. The land is immensely rich. Overflows ruined the farms, and there is a practically continuous swamp for 18 miles, where corn enough was grown 40 years ago to supply the whole county. It is figured that the drained land will be worth from \$40 to \$50 an acre.

### HIGH POINT INDUSTRIES.

Striking Illustration of Results of Community Efforts.

[Special Cor. Manufacturers' Record.]

High Point, N. C., October 11.

The growth of High Point has been phenomenal. In 1894 the population was 3210, with a manufacturing business of \$208,000. Today the population is \$15,000, with a manufacturing business of \$14,500,000. This place did not wait for outside capital to come down on it in a lump, but its citizens erected new factories with their own money as fast as they could make it, turning it back into new enterprises and enlarging the smaller plants. Some of these plants have as many as fifty stockholders, and the man who was of moderate means in the beginning was largely represented. So thoroughly was the manufacturing business instilled into the people that the highest ambition of the young man was to save enough money to put it into a factory. Many of these \$100 young men can today count their money by the thousands.

There are in operation 65 manufacturing enterprises in this city. Indications are that this number will reach, in all probability, 100 by 1911. But without this addition of new plants, the natural increase in the capacity of those already in operation will bring about the realization of all that the most sanguine could expect. Since High Point is known as a furniture market, the largest in the South, it has undoubtedly its peculiar advantages. So varied is the style of furniture manufactured that dealers find it convenient and profitable to buy here. This is true, both for large and small orders. Here the small retailer may place in one car all kinds of furniture needed in his store, at a large saving in freight charges. On the other hand, the large buyer of specific kinds may fill cars of any one article his taste or needs may suggest. He can get a thousand bedroom suites or 50,000 chairs, or any other article in large quantities he may desire on short notice.

While the furniture industry is large, the manufacturing interests of the town are diversified. Among other articles manufactured in High Point are overalls, hosiery, silk, glass, tobacco, pants, wheels, electric cars, paints, engines, iron piping, bed springs, iron beds, buggies, show cases, and numerous other goods which find a ready sale.

Municipal ownership of water and electric light and sewerage systems unite with the comparatively nominal rate of taxation. At present this rate is \$1.33 on the \$100 property valuation, including school tax. Such a condition of things, existing in an up-to-date modern town in every particular, is not short of marvelous. The attention of homeseekers and investors naturally and speedily turns to such a thriving place where one may hold real estate and carry on business, without the feeling that he is being taxed to death. It also throws a sidelight on the high moral standing of the city government, where such a thing as graft has never been known. The assessed value of taxable property in the city for 1907 was \$3,349,718. The estimated actual value of property is \$7,000,000. The school property, which includes two handsome school buildings and spacious lots, is valued at

\$65,000. The city water-works and electric light plants are valued at \$150,000.

The very recent improvements which have taken place in the city are the following: The Tomlinson Chair Manufacturing Company is just completing a brick and concrete addition to its plant 60x150, five stories, at a cost of \$25,000. The output of this plant amounts yearly to one million dollars, and it is the largest chair manufactory in the South. The Stehli Company of New York, owner of the silk mill at this point, is adding to its silk plant at a cost of \$30,000. The High Point Hosiery Mills are building a brick addition which will cost from \$15,000 to \$20,000. The Southern Power Company will have its current in High Point by November 1. This will give a cheap power to smaller manufacturing enterprises, which should bring a number of them to this point. The power station is already built. A new cotton mill, costing \$200,000, will soon be built. The Interurban Belt Line, connecting High Point, Winston-Salem and Greensboro, is expected to be completed by the end of the present year.

All indications point to a prosperous year in and around High Point, and judging from the present volume of business, this city will continue to grow in all the lines of manufacturing, strikingly illustrating the value of a community, using nearly every material in manufacturing, keeping money at home and ceasing to be dependent on other sections for such articles which it can just as well manufacture within its own gates to its own advantage and to its own material advancement and prosperity.

ALEXANDER HELPER.

### IRON MINING BY WATER.

#### Application of Hydraulics in Handling Soft Ore.

Editor Manufacturers' Record:

Next to the mining of soft iron ores with steam shovel, hydraulic methods are by far the most successful and the cheapest, if conditions are favorable. In some portions and some mines of the South steam shovels may be used successfully, but in many such is not the case, and even if it be, water as a mining and transportation agent will in most cases, outside the Lake districts of the Northwest, prove preferable to the steam shovel, and by far more economical and satisfactory than the pick and shovel or the steam shovel. In some instances and in some properties the milling system is the only feasible one, but where the ore lies in clay matrix, carrying small percentages of iron as to clay, or in beds whose walls are firm, water may be successfully employed where with any other method failure would follow.

It will not do to accept these statements without weighing all surroundings, as while in many cases they apply, in others they do not, as in deposits where the overburden, or the hanging walls, are of loose broken rock or hard shale, or where the ore lies in alternating bodies with boulder wash and heavy sand and gravel, or further, where the topping carries excessive amounts of shattered undissintegrated chert. Then the miner must follow with pick and shovel, or lower his grade, as pickers cannot separate small particles of silica from the ore. Thus judgment and knowledge must be the guide as to the feasibility of using hydraulics.

Gravity is the first essential, and without it success will not result. But, as is usual throughout the Southern field, the ores lie in the mountains and foothills and generally elevated points, and there being in the field few true limonite ores, water, as a rule, can be employed not only in mining, but in transporting the product

to the washers and the railway cars, or the furnace, as the case may be.

As in many cases, the ore bodies lie remote from the washer site; dummy or tram lines are far more expensive in construction and operation than is the laying of a pipe line and building of a flume from cuts to the washers.

In case of hydraulics the cost of installation of a pump of sufficient capacity and strength to lift the water to the ore bodies and furnish pressure for the giants, the required boiler capacity for the pump and engines, the cost of piping and flume line, and of purchase and laying constitute with the washers all necessary outlay and save labor, fuel and general expense attached to dummy lines or trams. While the operation of such plants is familiar to many, yet to others it is unknown, and details of an operation will prove interesting. Here it follows:

While 7 per cent. fall is ample for the flume, in this case 20 per cent. is available, with the result that less water does the transportation than would be the case with less fall. The plant embraces two 40-horse-power boilers, one compound duplex pump of a capacity of 400 gallons per minute, one 15-horse-power engine and one pair of 30-foot logs. The ore crops at a point 1200 linear feet from the railway siding, at which point the washer stands on an elevation 30 feet above the level of the track. The boiler, pump and engine stand upon the level of the siding for convenience in unloading coal, and through a ditch from a large creek the necessary water is brought into a sump, from which the supply is drawn.

From the pump to the mine a six-foot wrought pipe is laid, being tapped at proper elevation to supply rinsing water to the washer, while some 400 gallons per minute are forced through the main pipe to the washer, and through a giant with one-and-one-quarter-inch nozzle, with sufficient pressure to cut down the bodies of clay and ore, except in cases where the ore is found solid or massive, when a light load of dynamite shatters the mass, so that the nozzle easily cuts it down. From the washer to the cut is laid a 10-inch flume of two-inch yellow pine, bottomed with chilled cast plates, three-quarters of an inch thick by ten inches wide, and from which flume light boxes are laid into the cuts, through which the ore is carried to the main flume. As work progresses these boxes are extended into the face of the cut, the latter being always kept in hopper form, so that, as the water loosens the material, it drops and is washed directly into the boxes and thence into the flume. The water that does the cutting, thus acting as a transportation agent, carries without further cost all the ore and clay directly into the washer at the base of the hill, and the ore passes through the washer past the pickers, who remove any rock the ore may contain, and the finished product runs down a chute to the cars, while the dissolved clay flows out of the back end of the washer into a box, which deposits it on the flat lands below, where the clay settles and the water cleared passes again into the creek.

Thus you will observe that the one man with the nozzle mines the ore, and by judicious work always reserves enough available clay to add to the ore in case the body of ore is found solid, in which case, without the aid of the clay as an ally, the water, owing to the specific gravity of the ore, would not move it down the flume, and chokes would result.

Usually the nozzleman has two assistants, whose duty it is to cut roots, put in an occasional shot and break large lumps when they are encountered. This constitutes the mining crew.

Without further trouble or expense the

water carries the product into the washer, and no hand touches it from start to finish, except the pickers, who only remove the particles of rock which the ore may contain.

While in this instance cast plates are used in the flume, in some cases iron troughs are employed, but being concave, naturally all the ore follows in a line as near the center of the trough as possible, with the result that the constant wear in the bottom soon cuts through the trough and renders it useless. In cases where the fall is ample the flat plates are far cheaper, as the ore in transit spreads over the 10-inch surface. Hence the plates far outlast the troughs and cost much less, as there is practically no wear upon the wooden sides of the flume, particularly if the flume is straight.

The capacity of this two-log plant varies from 4 to 10 tons per hour, according to condition of the ore body and amount of trituration required to grind up the mud balls and any portion of the decomposed slate walls of the vein. In the average days from 400 to 600 tons of material are mined and transported in and through the washer. The cost of operation is: Coal, two tons, \$5; fireman, who also is pumpman, \$1.75; two pickers (one man, one boy), \$1.75; one nozzleman and two helpers, \$3.45; dynamite, oil, etc., \$1; total, \$12.95.

This is without superintendent, interest or depreciation, but it demonstrates that the cost per ton of ore is about 32 cents loaded on the cars. In this particular instance, with the addition of another set of logs, the output could be doubled with comparatively slight additional cost, which would still reduce the cost per ton of ore, as the pump, engine and boilers are large enough to supply two sets of logs.

HENRY V. MAXWELL.

Butler, Tenn.

### Vast Railroad Needs.

[Wall Street Summary.]

Richard H. Edmonds, editor of the MANUFACTURERS' RECORD of Baltimore, while in New York yesterday, in an interview with a reporter of the New York News Bureau, said:

"Though general business throughout the country has not yet joined fully in the remarkable activity prevailing in iron and steel, railroads are already becoming congested with traffic and many complaints of scarcity of cars are heard in Alabama and West Virginia and other iron and coal centers.

"We are now producing iron at the rate of nearly 30,000,000 tons a year, or over 3,000,000 tons above the record output of 1907. If other industries were as active as iron and steel (and they must inevitably become so), railroads would be as much overwhelmed with business as they were when the railroad system of the country practically collapsed in the summer and fall of 1907. Moreover, the really marvelous activity in iron and steel is as yet without the benefit of heavy railroad purchases of materials. When railroad buying attains the heavy totals which their necessities will force in the near future, the danger to the country will be a scramble for iron and steel products, with the possibility of a runaway market. There is possibly as much danger in a speculative iron market as in a wild stock speculation. If prices go too high consumption is checked, but while consumption is absorbing such a vast amount of iron as at present, the iron trade must of necessity be crowded at high pressure. What will happen when all business revives it is hard to say, but it is quite certain that the outlook indicates a very great expansion in every leading industry to keep in touch with the remarkable expansion of iron and steel. The

railroads seem to be at last waking up to the situation, but they have been so slow in doing this that traffic is already growing far more rapidly than railroad facilities, and the danger ahead of us is a collapse in railroads from inability to handle freight. Every day is simply emphasizing the fact that railroad expansion has not kept up with the growth of the country, and that at least \$5,000,000,000 to \$6,000,000,000 would be required to push railroad building and enlarging of railroad operations to a point where facilities for handling freight would equal the demands of the next two or three years. If \$1,000,000,000 a year for the next 10 years could be expended upon railroad construction the facilities at that time would not equal the certainty of the demand. Any legislative action that delays the investment needed for railroad construction simply intensifies the situation and really makes all present railroads a greater monopoly than if railroad construction could be broadly pushed in all directions.

"In connection with this marvelous expansion in iron and steel, it is evident that the great steel operators are endeavoring to safeguard the future by the purchase or control by lease of the sources of ore supplies. The announcement that the Bethlehem Steel Corporation has secured one of the large ore properties of Northern New York follows very quickly after the report that it has arranged for heavy investments in Texas, where, according to reports made by the Santa Fe Railroad to the State Railroad Commission, contracts have been made for opening up ore properties with a view to furnishing the Bethlehem people 1,000,000 tons of Texas ore a year.

"Similar efforts are being made in many directions as to coking coal properties, as well as ore properties, showing that the far-seeing men of today are recognizing the tremendous future through the ownership of the raw materials for iron and steel making.

"It is hardly to be expected that the rate of iron production which has prevailed during the last 40 years will continue for the next 10, but if it did so continue it would, as shown in a recent paper by Professor Porter of the University of Cincinnati, carry pig-iron production in 1920 to 85,000,000 tons. It is, however, entirely within reason to estimate that iron production will double by 1920, and give us at that time between 50,000,000 and 60,000,000 tons, which would mean a practical doubling of the entire iron, coke and steel industries of the country. As other industrial activities in the long run keep pace with iron and steel, this would mean that the general traffic of the country in 10 years will double, unless so hampered by railroad facilities as to make this impossible. The problem of the day, therefore, is to make a possibility the finding of the \$10,000,000,000 needed for railroad expansion during the next 10 years."

The Louisiana Agricultural Experiment Station at Baton Rouge has issued as Bulletin No. 117 an experimental study of bagasse and bagasse furnaces by Prof. E. W. Kerr and E. M. Percy, dealing with the use of bagasse as fuel in the manufacture of sugar.

The proceedings of the sixteenth annual convention of the Virginia Bankers' Association have been published in a handsome volume. The general officers of the association are Messrs. Henry A. Walker of Staunton, president; N. P. Gatling of Lynchburg, secretary, and Julien H. Hill of Richmond, treasurer.

The assessed value of real and personal property in Alabama is \$484,350,190, an increase over that of 1908 of \$16,565,582.



# ALACRITY OF SOUTHERN COMMERCIAL BODIES FOR NEW INDUSTRIES

## WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

### TO ATTRACT INDUSTRIES.

Board of Trade.

Grafton, W. Va., October 8.

*Editor Manufacturers' Record:*

The Grafton Board of Trade recently started to raise a fund of \$4000 to be utilized for the employment of an active secretary, to keep in close communication with large industrial enterprises, and when the soliciting committee completed its report a fund of nearly \$7000 had been subscribed. W. R. Williams has been secured as secretary, and has been active in his endeavors to locate industries since his arrival here. At present he is in touch with some very excellent industries which may locate here.

Recently ground was broken for a large branch wholesale grocery house by J. J. Orrick & Son of Cumberland, Md. The building will be a two-story stone and brick structure costing \$15,000, with frontage on three streets. The new produce house of C. B. Bailey is nearing completion. Mr. Bailey was forced to vacate the lot on which the Orrick company is preparing to build.

A number of merchants have recently remodeled their store fronts and other improvement on the inside which we feel are fine barometers of the improved business conditions. We would like to get into communication with parties desiring to enter the machine-shop business, as we have a building fully equipped which could be handled on very favorable terms by the right party. We would also like to get into communication with a shirt factory, as we have a three-story brick building, the lower floor of which is now occupied and operated by a laundry, which could be utilized.

W. R. WILLIAMS,

Secretary.

### WILL SUBSCRIBE TO STOCK.

Farmersville Commercial Club.

Farmersville, Tex., October 7.

*Editor Manufacturers' Record:*

The business men of Farmersville are anxious for the construction of a cotton mill to manufacture yarns or finished goods. These business men are willing to subscribe one-half of the necessary capital and offer every reasonable inducement to competent mill men to establish a 5000-spindle mill here. We have an abundance of lake and deep-well water; also first-class railroad facilities and the cotton grown at our door.

Having demonstrated this year that our black land will grow the finest broom corn, we want a broom factory, and will offer the same inducements to secure this as a cotton factory.

Farmersville has 3000 population, with practically every acre of the surrounding country in a high state of cultivation. Any specific information concerning these or other propositions will be furnished by the Farmersville Commercial Club.

JOHN H. ERICKSON,

Secretary.

### BOX FACTORY WANTED.

Commercial Club.

Sulphur Springs, Tex., October 7.

*Editor Manufacturers' Record:*

Sulphur Springs is situated in the best portion of the fruit and truck-growing belt of Northeast Texas, having unlimited sup-

ply of suitable timber for the purpose, plenty of the best water for all purposes, large territory tributary to Sulphur Springs, with trunk railroads in four directions. Would furnish free building site, and if necessary take a stock in enterprise with an experienced and practical manufacturer. Crop of 1910 will ensure sale of large output. If interested come and see us.

F. W. MACK,

Secretary.

### BUILDING BRIDGES RAPIDLY.

Commercial Club.

Dewey, Okla., October 4.

*Editor Manufacturers' Record:*

Although there has been no apparent unusual activity in the building and general development of Dewey and Washington county generally, we find upon comparing the present conditions with that of one year ago that our business buildings have increased about 30 per cent. and our residence buildings in the larger towns, particularly Dewey and Bartlesville, have increased in about the same proportions.

The building of bridges is of particular interest, as this was practically a bridge-less county at the time of the admission of the State into the Union. The structures so far have been principally steel, but there is a decided preference expressed lately for reinforced concrete bridges.

The Dewey Monolithic Concrete Construction Co., under the direction of C. W. Chappelow, has recently completed a concrete bridge which is a single arch structure over a 28-foot stream, built entirely of concrete, without the use of false work of any kind. This bridge is attracting attention over the entire country, and owners claim for it all of the advantages of the reinforced concrete construction less the expense of all false work.

On account of the reduction in the price of oil in the early summer there is not the activity in the development of oil and gas lands that obtained a year ago. This is partially offset, however, by the increased acreage under cultivation and good crops this season.

A number of factories have located in this country on account of the cheapness of gas for fuel, and special advantages in this line are still offered.

FRED B. WOODARD,

Secretary.

### INDUCEMENTS FOR INDUSTRIES.

Board of Trade.

Tullahoma, Tenn., October 9.

*Editor Manufacturers' Record:*

Tullahoma is keeping pace with the wonderful development of the South.

Now has the service from 18 daily passenger trains.

Had increased 140 per cent. in population between last two Federal census enumerations, and conservative estimates predict 100 per cent. between 1900 and 1910.

A Government building for Tullahoma has been authorized by Congress.

While recognized as a health resort, yet it is the right place for manufactories; a total of 24, big and small, now in operation.

The Knights of Pythias have just completed a splendid pike of three miles to Ovoca, where they will establish an industrial school for 200 orphan boys, a widows'

home, assembly grounds and castle hall. Work on cottages and auditorium is now under headway, and it is estimated that \$1,000,000 will be expended in making this one of the noted places of the South.

A county high school, a concrete produce house, a large hardware building, the rebuilding of the Tullahoma Tobacco Works and a number of residences are now in course of erection.

Campbell-Dann bent-wood works has installed a \$10,000 water-works system for fire protection. The Greenfield-Talbot-Parker-Battle Company has completed a large two-story warehouse addition to its already extensive plant, and city water mains have been extended through the plant, as well as the hub and spoke works of M. R. Campbell.

The Tullahoma tobacco district is attracting the attention of growers from other sections. Within the past two years 46 families have located here, and the tobacco production increased from 60,000 pounds in 1907 to 1,000,000 in 1908, and this year's crop is estimated at 1,500,000.

Tullahoma is endeavoring to secure the location of the Middle Tennessee Normal, and that she is progressive and wide-awake is proven by her offer of \$135,000 and the county's offer in addition of \$40,000 for the location of this school.

Tullahoma wants manufacturers, and there are exceptional opportunities here for handle works (to use the waste hardwood blocks and dimension stuff from four woodworking establishments); a canning and pickle works (no section in Tennessee is so productive of truck gardens); creamery, packing-house, knitting and cotton mills. Liberal inducements and encouragement offered.

DOAK AYDELOTT,

President.

### MIAMI'S RAPID GROWTH.

Miami Board of Trade.

Miami, Fla., October 7.

*Editor Manufacturers' Record:*

We are in receipt of the first copy of your excellent journal, for which we have recently subscribed, and it affords us great pleasure to state that the contents of this number alone is worth the price of subscription.

We shall take advantage of your offer to publish information concerning our city, and give you a brief outline of what we are doing.

A \$150,000 bond election has been called for the purpose of building roads. We now have over 200 miles of macadam roads in Dade county, of which Miami is the county-seat. The election will be held November 23.

We are offering a bonus of \$40,000 cash and a building site to any cigar manufacturer who will establish and operate a factory employing 100 cigarmakers or more.

The Federal Government is engaged in deepening our harbor, which will reach a depth of 18 feet by January, 1910. An appropriation of \$175,000 was also made for a Government building which will soon be erected on one of our prominent thoroughfares.

We are erecting a municipal building at a cost of \$20,000, and Miami rock is the material used.

A steamship line between Miami and Jacksonville has been recently established by local capitalists, and is enjoying gratifying patronage.

Several large buildings have been constructed the past summer, including a modern theater with a seating capacity of more than 1000.

The reclamation of the Everglades in

our immediate vicinity is attracting universal attention, and Miami is the Mecca of capitalists who are seeking investment in the reclaimed land which is pronounced as the most fertile in the State.

We have hundreds of acres of citrus groves which are just coming into bearing, this, in addition to the immense crops of vegetables and pineapples, will tax the one railroad and steamship lines to their utmost capacity. We are badly in need of more transportation facilities.

Miami, from a population of 50 souls in 1895, has reached the 8000 mark.

I wish you success in your efforts to advance the interests of the South.

ISIDOR COHEN,

Secretary.

### IMPROVEMENTS AT TEMPLE.

Commercial Club.

Temple, Tex., October 8.

*Editor Manufacturers' Record:*

Our city 28 years ago was a broad prairie with its lowing herds. Today we have 15,000 population. During the last 20 months Temple has had that spirit of unrest and optimism peculiar to the West, and has made wonderful progress hardly equaled by any other town or small city in Texas.

At an election recently held bonds were voted for the building of 24 city blocks of vitrified brick paving, and this is considered only a beginning. The contract for this work was let to Messrs. Oekander Brothers, and they now have all of their machinery and material on the ground to start the work. On October 7 the people of our city celebrated the occasion of the breaking of dirt for this work in a most fitting manner by holding a jubilee from early morning to late at night. This event marks an epoch in the history of our town and the starting point for the building of a great Central Texas metropolis. Our people have great confidence in the future of our city, and they have reasons therefor, in view of the fact that Temple today has more large business buildings and handsome residences under course of construction than any city of similar size in our great State.

We now have in course of construction a five-story bank and office building, covering a quarter of a city block; a five-story 100-room addition to the Stegall Hotel, a \$100,000 passenger depot, and in connection therewith a \$30,000 hotel and eating-house, the latter two being constructed by the Gulf, Colorado & Santa Fe Railway Co. We have just finished an addition to the Young Men's Christian Association building costing \$15,000 and a \$75,000 hospital and sanitarium, and several up-to-date two and three-story business houses. The Santa Fe is spending something near \$500,000 in the improvement of its terminals at this point, including a \$65,000 storehouse from which to supply its lines in Texas. Our city government is now spending \$150,000 in the improvement of its water system (and it may be stated in this connection that Temple is said to have one of the greatest water supplies of any city in Texas). The electric-light company is spending \$50,000 in the improvement of the lighting service, and when this is completed Temple will be one of the best lighted cities in our State. We now have under consideration the establishment of a knitting mill, which will employ from 150 to 200 people. It is given out on good authority that one of the largest dealers in heavy hardware in Texas will establish a branch house at this point. The Commercial Club is now organizing a company for the purpose of building a railroad from

Temple to the Thurber coal mines, thence to a connecting point with the Quanah & Gulf Railway, now under construction at Quanah. This project is considered not only a probability, but a sure thing.

We have in anticipation for next year some great undertakings. Starting with those assured, the city will build a high school building to cost \$60,000 and additions to our ward schools, running the amount of expenditure in this direction up to \$100,000, the election for which will be called for some time in January, when the people will vote for bonds for this purpose. One of the large department stores here has bought one-half block of ground, upon which will be erected a four-story building, which will likely be, when completed, the largest department store building in Central Texas. We also propose to undertake the erection of a large auditorium and exhibition hall, two stories, on the public square, same to cost \$50,000. Besides these there are many smaller enterprises in anticipation.

WM. M. WOODALL,  
Secretary.

#### ROOM FOR SEVERAL PLANTS.

Strasburg, Va., October 9.

*Editor Manufacturers' Record:*

We have room and great need of an ice plant, creamery, canning factory, vitrified brick plant and knitting factory. Here is a valuable deposit of cement rock. About 20 acres of the finest limestone land with an inexhaustible supply of the finest stone for lime known are right along the side of the Southern Railway. We have an estimated population of about 1800, four churches, fine public school, a hospital which is a marvel in its success, a 100-barrel flouring mill, hardwood factory, planing mill, grist mill, three limekilns, an electric plant, etc. A dozen buildings are in course of construction. There are no saloons, consequently we are free from the demoralizing effects incident to that kind of enterprise. JOHN W. FISHER.

#### BUILDING AT ETOWAH.

Etowah, Tenn., October 8.

*Editor Manufacturers' Record:*

Since our bond issue, of which you carried an advertisement, we have had an organization of an electric-light company by local capital, \$25,000; Mr. P. A. Kinser, president. This company will furnish lights for the town, as well as do a general electrical business. The Hiwassee Coal & Supply Co. is making preparations to erect an ice plant of 75 tons capacity, and should be in operation for the coming season. The Coker Creek gold mines are being pushed, and active operations are now going on profitably to the owners. Our two-story brick school building is progressing nicely, and will be a modern structure when completed. A three-story brick business building is almost completed, so you see we are progressive.

E. F. VANDIVERE,  
Recorder.

#### A BUILDING OFFERED.

Board of Trade.

Jonesboro, Tenn., October 8.

*Editor Manufacturers' Record:*

At a meeting of the Jonesboro (Tenn.) Board of Trade, held October 5, Capt. Ross Smith offered to sell his two-story-and-basement 80x36-foot hotel for \$1000 cash and \$1000 in stock to any company that could be induced to locate here. The building cost \$21,000. It adjoins the Southern Railway, and is well suited for manufacturing and shipping purposes. There is a good opening here for a laundry, veneering factory and knitting mill. Capt. Ross Smith, A. P. Mathes and E. J. Baxter were appointed to take up the matter with interested parties and invite correspondence.

H. C. BEAUCHAMP, President.

#### ON SEEING THINGS GROW.

Moral as to the South Drawn by a Friendly Critic.

*Editor Manufacturers' Record:*

The horticulturist feels a commendable pride in seeing the tiny shrub which he planted and nurtured with his own hands grow and expand into a beautiful tree, blooming and bearing its burden of delicious fruit. The florist feels a degree of self-complacency in watching the tiny plant which he has cared for and nourished grow to maturity and in due season budding and blooming and sending forth its beauty and fragrance to delight the senses. The farmer watches with an interest, not wholly free from cupidity, his waving fields of red and green ripening for the harvest. The artist's pale cheek glows with a ruddy hue as he sees the form and features of his study gradually assume lifelike appearance beneath the well-placed touches of his brush, guided by a skillful hand and artistic judgment. The sculptor's heart bounds with throbs of delight and hopes of fame as he sees the form and face of his subject gradually creep out from the solid marble beneath the well-directed movements of his mallet and chisel. What, then, must be the self-exaltation of him who sees an empire grow and expand before the magic of his pen? For 30 years the untiring efforts of the MANUFACTURERS' RECORD have induced capital from abroad and awakened dormant energies at home for the upbuilding of the South, developing her latent resources and causing her to move forward in the race for supremacy in agricultural, mining and manufacturing production.

The Southern people, at the close of that unfortunate and disastrous war, humiliated, almost heartbroken and despairing at the new and unaccustomed mode of life forced upon them by the exigencies of this cruel war, plunged into a state of hopeless inactivity, careless of or indifferent to the vast undeveloped resources of their country, mainly by your untiring efforts were aroused from that state of lethargy and with renewed hopes took on new life and have built up their "waste places" and made their "deserts to blossom as the rose." Texas, with a bad name to begin with, laboring under bad laws, badly administered, was slow to catch the step in the onward march toward development; but she has of late joined the army of progress, and is now fast forging to the front. Foremost in the production of cotton, she is assuming agricultural importance in the production of cereals and garden fruits and vegetables. While the northern and middle portions of the State have for some years been noted for wheat production, and some portions of the eastern part been found available for the growing of rice, the southwestern portion of the State, though rich in alluvial soil, from the slight rainfall in summer has been devoted almost exclusively to the growing of cotton and stock-raising; but now that an artesian belt has been found, extending from San Antonio south and east almost, if not quite, to the Rio Grande country, dry farming, always a dangerous expedient at best, has ceased to be resorted to where irrigation can be had. As these artesian wells each send forth sufficient water to irrigate hundreds of acres of land, this irrigable belt will take a position in the production of early garden fruits and vegetables that will push to the wall the far-famed California fruits and vegetables. So productive is this soil known to be, and so confident are the landowners of this incipient enterprise, that one man, Mr. Asher Richardson, a large landowner and wealthy cattleman, has built and equipped 32 miles of railroad through his artesian land to connect with the International &

Great Northern road at Asherton, and is now running trains to that point, carrying passengers and materials for building and fencing the small tracts that prospective gardeners and farmers are eagerly purchasing. The soil along this belt is from two to six feet deep, and rivals in productivity the famous Valley of the Nile. The climate is so genial that three crops can be grown on the same land in one year, so that we may reasonably expect in a short time to supply Northern cities with fresh vegetables in midwinter. As further evidence of the progressiveness of this section, a bonus has been raised and contract entered into that secures the building of a road from Fredericksburg to connect with the San Antonio & Aransas Pass road at Waring, which will put this city in direct communication by rail with that inland town nestling among its marble and granite hills, whose intervening valleys yield wheat equal in quality and quantity per acre to that of the great wheat-growing sections of the Northwest. Fredericksburg is the largest inland town in the Southwest, or anywhere else in this country, without water or rail communication with the outside world, and when this railroad connection is made and capitalists can see the quality and quantity of the marble and granite in her surrounding hills and begin to drag from their ancient beds these hidden riches, it will become one of the best border towns of the West. To the efforts of the MANUFACTURERS' RECORD for the upbuilding of the South can easily be traced the progress and prosperity we are now enjoying. When the great Roman architect was approached by some friends with the information that a monument would be built to his memory after his death, and they wished him to draw the design, he waived them aside, saying: "Si vis meum monumentum circumspicere." THE MANUFACTURERS' RECORD can point to the thousands of smokestacks, whirling spindles, blazing furnaces and broad acres of agricultural products, luscious fruits of orchard and garden and vegetables, and with pardonable pride say with the old Roman: "If you wish to see my monument, look around." K. K. San Antonio.

#### SECURITY CEMENT AND LIME CO.

Important Plan for Big Cement and Lime Works.

THE MANUFACTURERS' RECORD has been advised of an important plan for the manufacture of Portland cement and all kinds of lime and stone products in Maryland and West Virginia. This plan involves the Maryland Portland Cement Co. of Baltimore, which proposes to change its title to the Security Cement & Lime Co., with a capital stock of \$2,000,000 and a bond issue of \$1,000,000. It provides for taking over the Berkeley Limestone Co. and properties at Martinsburg, W. Va., and operating a large modern plant for the production of lump lime, hydrated lime and other lime and stone products, the daily output of lump lime being 2000 barrels. Dr. Lazelle of the Charles Warner Company, Wilmington, Del., will be the engineer in charge. The Security Cement & Lime Co. will probably organize with the following officers: President, A. W. Page, president of the Nazareth Cement Co., Nazareth, Pa.; vice-president, Charles Warner of the Charles Warner Co., Wilmington, Del.; secretary-treasurer, Loring A. Cover, president of the Maryland Portland Cement Co. The latter company has determined all details for its recently announced enlargement of the plant at Security, Md. Its improvements will include the erection of a 100x200-foot concrete and steel stockhouse costing \$45,000, the installation of two kilns 128 feet long by 8 feet in diameter, the addition of

a 1200-horse-power steam turbine to the 1400-horse-power steam engines now used, the installation of all accompanying equipment, and the erection of a crusher to furnish stone for manufacturing cement, ballasting and other purposes. These improvements are to be completed by next May and will increase the company's daily output from 800 to 2400 barrels of Portland cement. The engineer in charge of these improvements is F. H. Lewis of Leeds, Ala., who was in charge of planning and constructing the original plant. The Maryland company increases its capital stock from \$400,000 to \$800,000 in connection with the improvements.

#### A Call from Mississippi.

*Editor Manufacturers' Record:*

I read with the greatest interest all you have to say relative to the South and its future, and, as there is no one any more interested in the growth of the South than I am, I take pleasure in giving my views of the situation. First, I feel that there is not another country in the Western Hemisphere that needs a commercial education any worse than the cotton belt of the South. I was born and reared in Mississippi; I have watched the progress of the State; I have wondered what the outcome would be; I have seen the people worship cotton, plunge headlong into the credit system, work negroes to buy mules, to work more negroes to buy more mules, until now, alas, the great Almighty has sent the plague (the boll-weevil) and has stopped the wheel, as far as our farming tactics go. What are we to do? Our people know nothing else; the generation since the war has not been taught anything else. Hence, here we are now like a band of pilgrims landed in a new country without home, without talent. You can read in the furrowed brow of every man: "Nothing but leaves, the Spirit grieves o'er the years of wasted life." It has been come easy, go easy; in fact, the cotton belt has not progressed an inch since 1865. We have a civilized, undeveloped country.

I say there are thousand of opportunities for the South. I say within 10 years this country will make the greatest progress of any country ever on record. I read with a great degree of pride and inspiration of hope the headlines of your MANUFACTURERS' RECORDS "The Development of the South Means the Enrichment of the Nation." I would to God that that be true. We realize that the South is the easiest place on earth to get rich. Every man from the North that comes here soon accumulates a fortune. People from other countries get rich on our waste baskets, but we can't do it. Why? Because we don't know how. We act as a set of mummies. We don't think for ourselves. We breed "suckers" instead of business men. We wait for the North to suggest a scheme and we will finance it. We wait for the North to grow our corn, oats, hay and everything else except cotton, and then the North buys it at its own price, converts it into clothing and we buy it back at their price. But alas, I repeat, the end has come; we must turn our attention to something else.

What are we to do? First, we have the Garden of Eden of America, a land strewn with rippling springs and flowers. In less than 10 years the South will be the health resort of the world. In less than 10 years the potteries of the world will be in the South. The land of Mississippi is but a bed of the finest fire-clay. For grain, hay, stock and poultry I feel that no other country equals this land of ours. But we need education. We need markets for our products. I can say, without fear of contradiction, Mississippi makes the finest grade syrup of any country. Our lands are particularly adapted to vegetables of



all kinds. But we want the Northern people to come South and buy up the large farms and show our people what to do, and what can be done, and until this is done the South is going to suffer untold hardships. If the MANUFACTURERS' RECORD can be of any service to me in procuring these great needs of ours, God knows we will ever cherish a heart of love for it.

[The optimism which threads its way through the pessimism of our correspondent will be reinforced by recalling an article in the MANUFACTURERS' RECORD of December 31, 1908, in which, discussing the effects of the coming of the boll-weevil to the vicinity of Natchez, Thomas P. Grasty said:

"The very discussion of this problem started an 'exodus' of negroes, and for a while during the last six weeks there were some who could see no way of escape from widespread calamity. But the more intelligent farmers and big 'planters'—and only the owners of large plantations are called 'planters'—are no longer indulging in evil forebodings or 'calamity howls.' On the contrary, they are looking the situation squarely in the face and are determined to make the best of it. This is about what they are saying: 'The existing situation simply means that we must now do what we ought to have done long ago; we must plant less cotton and raise more food crops. And in planting cotton we must plant earlier and select those varieties that mature quickest, and the crop must be pushed to maturity by more thorough and rapid cultivation than has heretofore been practiced. And if the negro "exodus" leaves us with an insufficient supply of labor—as it has already done in many localities—we will start the biggest and most energetically conducted immigration movement the South has ever seen. We will go forth and bring back working farmers to buy acreages no larger than they can cultivate with their own labor, and as an inducement we will make terms to suit the needs of all industrious farmers who want to improve their chance quickly to accumulate a competency, who want to live where there is most to make life worth living, and to work where the return for every atom of expended energy is larger than anywhere else in the world.'

"That's the way they talk, and if they will act accordingly, the boll-weevil, heralded everywhere as the curse of the cotton country and an unprecedented menace to its prosperity, will doubtless prove a blessing in disguise.

"The advent of the boll-weevil will necessarily mean the abolition of the 'advancing system,' which for years has been the curse of the best and richest cotton-growing districts of the South. Under that system it was impossible for the landowner to control his labor. Through the ignorance, indifference and—to use a phrase well understood in the South—the 'triflingness' of most negroes and many poor whites cotton cultivation has been always less thorough than it should have been, and in many cases of a kind to destroy forever the productivity of the soil. The system of 'advancing,' i. e., selling on a year's credit in advance of the maturity of the crop, with no other security than a thing at the start not in existence, a crop requiring many months to make—furnishing whatever the renter may want on the expectation that he will bring in enough cotton 'to pay out'—has long been regarded by thoughtful men as a most pernicious system. It operated as a temptation to thriftlessness, and often to dishonesty, as an invitation to self-indulgence rather than an incentive to earnest endeavor. For, how can even the average white man, with a contract in his pocket guaranteeing that all his wants will be supplied, whether he works industriously

or indifferently, be expected to do his best, much less the ignorant negro, whose nature and training have rendered him essentially incapable of doing anything except in the simplest and easiest way, and who seldom has any ambition to accumulate property or any realization of the necessity of laying by 'in store for a rainy day?' Therefore, the coming of the boll-weevil meant, at least, an immediate curtailment of this 'advancing' business. And only to those laborers whose docility, industry and reliability give earnest of fitness and ability to raise a crop in spite of the boll-weevil will even limited advances be made this year. But it got noised abroad on the plantations that it had been finally and definitely decided by merchants and landowners that all 'advances' had to stop. And that is what precipitated the 'exodus' of so many negroes, who are moving into sections where 'advancing' will continue, maybe for another year, maybe for two or three years. But as a system the 'advancing' of supplies to farm laborers has had its 'Mene, mene, tekel upharsin' written on every wall within the confines of cotton-dom; for, wherever it is practiced the negro works when he pleases and plays when he wills. When ordered to plant early and push cultivation he will, if in possession of a contract under which everything he wants is to be 'advanced,' promptly say 'yes, sir,' and then go right along following the beaten path he has followed for 40 years."—Ed. MANUFACTURERS' RECORD.]

O. P. McPHERSON.

Gloster, Miss.

#### Concrete Buildings in China.

The following information concerning the concrete industry of Swatow is furnished by Consul Albert W. Pontius of that Chinese port:

The construction of houses and walls of concrete is an industry peculiar to Swatow. The work was instituted several hundred years ago, and the absence of any buildings or walls constructed of brick is conclusive proof of its stability and lasting qualities. The industry originated with a French priest, who constructed one wooden mold which is elevated in a runway supported by firmly set poles, and in lime are the ingredients of which the material is made. The mixture, after being thoroughly incorporated, is slightly moistened, and then pounded in a rough of his chapels of this material.

Very small pebbles or shale, sand and spite of the crude methods employed, a height of 60 feet can be easily reached. When the walls have been constructed all supports are removed and the concrete is for some days exposed to the air. To this exposure is its characteristic solidity solely attributed. The walls vary from 12 to 16 inches in thickness, and the cost of construction is considerably less than brickwork. The thickness of the walls gives absolute guaranty of fireproof qualities. Storehouses and buildings constructed of this material many years ago are conclusive proof of its strength and durability. No single instance has been known of the accidental collapsing of such concrete-built walls.

In some instances split bamboo poles have been used to reinforce the material, the wood preventing cracks from appearing and adding to the strength. Bamboo imbedded in the concrete in this manner does not rot, and it seems odd that the practice is not more general. Steel or iron reinforcing, owing to the added expense, is never used. The cost of construction is invariably figured at \$9 Mexican per Chinese chang (\$3.67 gold per eight square feet).

#### Electric Smelting of Iron Ore.

The Electric Iron Co. of Trollhättan, Sweden, has recently been organized in Stockholm for electric smelting of iron ore for producing pig-iron on a commercial scale. The new plant is to be erected at Trollhättan, where the Government owns a large hydro-electric power station, from which electric energy is sold at cheap rates to surrounding cities and industrial consumers. The falls yield about 75,000 horse-power, but will in the future after regulation of Lake Venern give 150,000 horse-power. Electric power will be bought from the Government at the rate of \$7.46 per horse-power year for the first 10 years and at \$10 per horse-power for the following 10 years. A preliminary contract for renting up to 10,000 horse-power has been drawn up.

The first installation is to consist of three ore-reduction furnaces of 2500 horse-power each. Of these, one furnace is to be in reserve. The yearly production is calculated at 15,000 metric tons of pig-iron, or 7500 tons for each furnace. The pig-iron produced is intended to be used for foundry purposes only, and to contain .4 to 1 per cent. of phosphorus. Phosphorus-carrying ore from the Grängesberg mining district will be used. For the reduction of the ore German coke from the Westphalia district will be used, costing at Trollhättan \$5.60, which is considerably cheaper than the Swedish charcoal ordinarily employed in Swedish blast furnaces at \$13.65 per ton.

The cost of the new plant is estimated as follows:

Three smelting furnaces.....	\$49,000
Ladles, ladle cars and various appliances.....	4,000
Crushing plant (35,000 tons of ore and 7000 tons of coke annually).....	2,400
Transformer and motors for crushing plant, for transportation, lighting, etc.....	1,600
Conveying machinery for conveying between harbor and crushing plant and to top of furnace.....	4,000
Machinery for conveying pig-iron and slag, and trucking.....	3,200
Buildings for furnaces and coke storage.....	16,000
Building for crushers.....	1,100
Excavation, grading, fencing and harbor work.....	4,000
Office and laboratory.....	5,500
Superintendence and incidentals.....	9,100
Royalty.....	6,700
Total.....	\$97,600

—Mr. H. Hultegård, Busby, Sweden, in *Electrochemical and Metallurgical Industry*.

#### AS A WAY STATION.

##### Baltimore and Pullman Accommodations to the South.

Editor *Manufacturers' Record*:

In view of the strenuous effort put forth recently by the merchants of Baltimore to link that city closer to the South, I can but feel how unfortunate it is that Baltimore has such poor railroad facilities or accommodations to this section. On several occasions I have tried to secure a berth from Baltimore to some Southern city, only to learn all berths had been sold, thereby making it necessary to leave a day later than I desired. An experience last week was most exasperating.

After trying for nearly 36 hours to secure the drawing-room to Birmingham on a certain train I was informed after a long wait there was only one upper berth on two trains, either one of which would have suited me. I was then compelled to leave a day later, and then, after having a section reserved in Baltimore, learned on arrival at Washington that no reservation had been made. I did learn, however, from observation that the drawing-room had been secured by a negro man and wife, one of Booker Washington's college instructors, and in another Pullman adjoining was another negro man and

woman, an unusual sight in this section of the country.

I am authoritatively informed that all reservations for space on the Southern Railway trains in Baltimore must be made through the Pennsylvania Railroad in New York, treating Baltimore as a little way station instead of a big growing city. A very prominent business man in Birmingham told me a day or two ago that he did not stop in Baltimore oftener because of these conditions. He says he goes on to New York because he can get what he wants on the railroads without delay. It seems to me Baltimore is a big enough city to have at least a portion of a Pullman car at its disposal. I. S. F.

Atlanta, Ga., September 28.

#### Inspired by the East.

Mr. M. F. Dickinson of Conway, secretary of the Arkansas Farmers' Union, who was one of the guests of Chairman B. F. Yoakum of the Rock Island-Frisco system on the trip of inspection of improved highways in New England, in an interview with the *Arkansas Gazette* said:

"The problem of road construction has certainly been solved in the States we visited. Each State is appropriating from \$250,000 to \$1,000,000 a year to construct State highways. I believe that Arkansas can build good, substantial roads that will hold up under the traffic for a nominal cost varying from \$500 to \$4000 per mile. The cost would vary according to the width and depth of the roadbed, the amount of drainage and grading required and the class of material used. If the farmers of the State, who are the real losers because of bad roads, could visit the East and see what can be done in road-building, they would come before the next Legislature with such strength that a nice appropriation would be made to start the work on their own roads."

#### Chattahoochee Power Co.

The Chattahoochee Power Co. of Columbus, Ga., has been incorporated with a capital stock of \$100,000 and privilege of increasing to \$2,000,000. It has purchased lands and water rights on the Chattahoochee River at Blanton Ferry, midway between Columbus and West Point, Ga., where it plans to build a water-power-electric plant for developing and transmitting 8000 horse-power by electricity. The plant will include the construction of a dam 1000 feet long and 30 feet high, involving 40,000 yards of masonry, and the installation of horizontal wheels direct connected to electric generators. J. E. Sirrine of Greenville, S. C., is the engineer in charge, and the cost of the initial dam, power-house and transmission lines is estimated at \$400,000. The incorporators of the company are B. H. Hardaway, T. A. Jamison, George A. Pearce, Richard W. Needham and others, all of Columbus.

The Sapp Rice Co., recently organized by E. E. Sapp of Stilson, Tex., and others, proposes to drain between 5000 and 10,000 acres of land near Stilson, about 35 miles east of Houston, and to convert them into rice farms. The land will be irrigated by water from Trinity River.

Mr. James S. Kuykendall has resigned the secretaryship of the Chamber of Commerce of Greensboro, N. C., and has become secretary of the Board of Trade of Winston-Salem, N. C.

The Pecan-Alfalfa Production Co., Edgar B. Marchant, manager, Clinton, Okla., proposes to plant in pecans and alfalfa 1000 acres of land in Hidalgo county, Texas.

# GOOD ROADS

## WEEK'S HIGHWAY RECORD.

### Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

#### Bonds Voted.

Anahuac, Tex.—Chambers county voted \$65,000 road bonds.

Anson, Tex.—Jones county voted \$15,000 bonds for road and street improvements.

Reidsville, N. C.—City voted bonds for additional granolithic sidewalk.

#### Bonds to Be Voted.

Carthage, Tenn.—Smith county votes February 26 on \$100,000 bonds for road and street improvements.

Miami, Fla.—Dade county will vote on \$150,000 bonds for road improvements.

#### Contracts Awarded.

Houma, La.—City awarded contract for constructing sidewalks.

Houston, Tex.—City awarded contract for paving five blocks on Walker avenue; cost \$6000 in addition to bricks, which will be furnished by city.

Jacksonville, Fla.—City awarded contract for 3000 linear feet of tile sidewalk.

Montgomery, Ala.—City awarded contracts for asphalt paving on Lawrence street.

New Decatur, Ala.—City awarded contract at about \$15,777 for gravel and tar paving.

Norfolk, Va.—City awarded contract for Westover and Graydon avenues improvement; 14,000 square yards of Trinidad asphalt and repairs.

Sarasota, Fla.—City awarded contract for improving four miles of streets.

Texarkana, Tex.—Bowie county awarded contract at \$175,000 for constructing 42 miles of graded and graveled roads.

#### Contracts to Be Awarded.

Alexandria, La.—City adopted ordinance for sidewalk and curb construction on Bolton avenue.

Bristol, Tenn.—Sullivan county rejected bids for \$200,000 worth of road improvements, recently mentioned.

Columbus, Ga.—City will pave 13th street from 1st to 6th avenue.

Dallas, Tex.—City will invite bids for paving Cedar Springs avenue and Highland street.

Dallas, Tex.—City will open bids October 20 for bitulithic pavement on concrete foundation, rock asphalt on concrete base, concrete curb and gutters on Poydras street.

Ensley, Ala.—City opens bids October 19 for artificial stone sidewalk, curbs, gutters and grading.

Gadsden, Ala.—City has practically chosen contractor for street paving in business section; 22,000 square yards of vitrified brick at \$1.71 per yard.

Heber, Ark.—City contemplates constructing two miles of concrete sidewalk.

Jacksonville, Fla.—City plans sidewalk construction, for which \$100,000 will be available.

Little Rock, Ark.—Superintendent of Public Works estimates cost of macadam paving, curbs and gutters on 14th street at \$30,402.

Oklahoma City, Okla.—City awards contract October 25 for sheet asphalt paving estimated to cost \$250,000.

Washington, D. C.—District Commissioners open bids October 15 for macadamized pavement, curb, gutters, etc., on 13th street N. W.

Wheeling, W. Va.—Ohio County Commissioners opened bids today for macadamizing 600 yards on National road.

## Activity in Texas.

As indicative of the activity in Texas counties in taking advantage of the recent legislative act authorizing the creation of road improvement districts and the issuance of bonds, the *Galveston Tribune* says:

"During the past week there have been three bond issues approved by the Attorney-General's department providing for the improvement of the roads. Hidalgo county road improvement district No. 1 issued \$100,000 in bonds, Brown county issued the same amount and Ellis county improvement district issued \$250,000. The department has also the records of several other districts that are awaiting approval."

## Appalachian Good Roads.

The meeting last week at Asheville, N. C., for the promotion of the movement for a system of highways in the Southern Appalachian Mountains resulted in the organization of the Southern Appalachian Good Roads Association, with Dr. Joseph Hyde Pratt of North Carolina, president; W. L. Spoon of North Carolina, secretary, and Joseph G. Brown of North Carolina, treasurer.

## Bonds in Tennessee.

M. O. Eldridge of the Good Roads Bureau of the National Department of Agriculture points out that in the past few years seven counties in East Tennessee have expended \$2,189,000 upon road improvement, as follows: Knox, \$664,000; Jefferson, \$375,000; Hamblen, \$300,000; Anderson, \$300,000; Campbell, \$300,000; Roane, \$200,000, and Union, \$50,000.

## Notes.

With \$100,000 provided by a recent bond issue, a network of improved roads radiating from Palatka will be built.

Delegates from all parts of Alabama are expected to attend the convention this week at Birmingham of the Good Roads Association of the State.

A meeting will be held at Alexandria, Va., October 18, to further the movement for an issue of \$250,000 of bonds for permanent highways in Alexandria county.

Mr. P. H. Hanes of Winston-Salem has been elected president and Dr. Joseph Hyde Pratt, State Geologist of Chapel Hill, has been elected secretary of the North Carolina Good Roads Association.

Thirty-two events are scheduled for the two-mile automobile speedway at Atlanta November 9-13. This speedway cost \$300,000. The events will be under the auspices of the Atlanta Automobile Association, Aza G. Candler, Jr., president, and Edward M. Durant, secretary.

The Good Roads Bureau of the National Department of Agriculture has consented to survey, upon demand, the route through Liberty county, Texas, of the proposed New Orleans-San Antonio highway, in which Col. Sam Park of Beaumont is deeply interested.

The Santa Fe system is building a union station at Bartlesville, Okla., and is also spending considerable on yard improvements. Altogether the work will cost about \$100,000.

The fall general meeting of the Merchants and Manufacturers' Association of Baltimore will be held on the evening of October 21.

The new station at Little Rock, Ark., has been put in service. It cost about \$400,000.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

## YEAR ON THE SOUTHERN.

### Double Track Building to Relieve Congestion—Good Financial Showing.

The Southern Railway Co.'s fifteenth annual report covers the fiscal year ended June 30, 1909, and shows, as compared with last year, a large increase in net earnings, although there was a small decrease in gross, the gain in net having been effected by reducing expenses. The figures are: Gross operating revenues \$52,188,106, decrease \$753,609; total operating expenses \$35,568,980, decrease \$4,285,741; net operating revenue \$16,619,126, increase \$3,532,131; operating income (after adding receipts of \$136,963 from outside operation and then deducting taxes) \$14,839,387, increase \$3,759,098; total gross income \$17,737,609, increase \$3,890,732; balance of income over charges \$3,589,385, increase \$3,187,535; balance carried to credit of profit and loss \$3,511,100, increase \$3,231,957. The average number of miles operated during the year was 7170, a decrease of 318 miles.

President Finley says that while the operating revenues show an apparent decrease, this is because the Tennessee Central Railroad and the Southern Railway in Mississippi were separately operated during the past year. Also, the study and practice of operating efficiency were vigorously pursued, and the operating ratio, excluding taxes, was reduced from 74.79 in 1908 to 68.16 in 1909. Of the total decrease in operating expenses, 55.70 per cent. was in transportation expenses. Particular attention has also been paid to removing the causes for loss and damage claims, and the disbursements for this account were at least \$800,000 less than in 1908. While expenses show material reductions, the upkeep of the property has not been neglected.

During the year much construction work was resumed. The principal work has been providing additional double track. The revision of grade and double tracking of main line south from Monroe, Va., across the James River through Lynchburg, and thence over the Staunton River to Sycamore, Va., 38 miles, shortening the old line two miles, is perhaps the most important. Part of this new double track from Durmid to Sycamore, 30 miles, has been in operation since April 30 last, and the remainder, which includes a viaduct over the James River and a tunnel 1300 feet long at Lynchburg, should be ready for operation next spring. Work was also resumed on 14 miles of double tracking between Ooltewah Junction and Chattanooga, Tenn., and this is being pushed. About two and one-half miles north from Greensboro, N. C., and four and one-half miles west out of Asheville, N. C., are other pieces of double track under way. Since the fiscal year ended contracts have been let for second track from Spencer, N. C., south to Glass, nearly 19 miles, and from Charlotte, N. C., north to Harrisburg, about 13½ miles.

Parts of the projected low-grade Little Tennessee River line, to connect Knoxville with the Carolinas, upon which work was begun several years ago, have been completed and put in operation, namely, 25.30 miles, from Maryville to Chilhowee, Tenn., which was built in the name of the Tennessee & Carolina Southern Railway Co., and 13.90 miles from Bushnell to Fontana, N. C., which was constructed in the name of the Carolina & Tennessee Southern Railroad Co. These lines are operated for local service, but it is not proposed to immediately push the work

through. The present construction policy of the company is to enlarge the capacity and facilities of its existing lines, where a heavy traffic is assured, rather than exploit new territory or risk new lines.

More than 70 per cent. of the tonnage hauled by the road was produced in the South, principally on the lines of the company. This shows the independent position of the property. The tonnage increase per mile for 10 years was 42 per cent. About one-third of the traffic was coal and another third manufactured articles. More than \$2,500,000 bales of cotton were handled during the past year, or 636,207 tons, yet this traffic was less than 3 per cent. of the total tonnage. The textile industry in the South took 2,523,873 bales, or over 18 per cent., of the last cotton crop, and the Southern Railway handled during the year 61 per cent. of the manufactured products. Including all products of cotton, from the staple itself to the seed and other yields, there was a total of 1,600,000 tons handled, or practically 7¼ per cent. of the total tonnage.

Along the lines of the company there were completed during the year 453 new manufacturing plants, and at the close of the year 66 plants were under construction, while during the year additions were made to 123 plants. There are now at least 10,000 manufacturing plants on the Southern Railway's lines.

The total assets of the company are \$491,821,390, which includes cost of road, equipment and leasehold at \$374,333,783. The capital stock is \$120,000,000 common and \$60,000,000 preferred; the funded debt, \$234,002,400; total capital, funded and lien liabilities, \$466,609,876.

## LOUISVILLE & NASHVILLE.

### Annual Report Displays Gratifying Income Results and Energetic Work for Betterments.

The annual report of the Louisville & Nashville Railroad is the fifty-eighth of that company, and covers the fiscal year ended June 30, 1909. It shows total operating revenues \$45,425,891, increase as compared with last year \$805,611; total operating expenses \$29,627,490, decrease \$3,966,791; net operating revenues \$15,798,391, increase \$4,772,402; operating income after the payment of taxes, etc., \$14,284,845; total income, \$15,679,969; balance after the payment of interest, rentals and sinking fund charges, \$8,132,791; net income transferred to credit of profit and loss, \$7,721,388; balance to credit of profit and loss June 30, 1909, \$23,431,527.

Following the general plan for the reduction of grades between Nashville, Tenn., and Henderson, Ky., construction was begun on a cut-off about five miles long from Madison, Tenn., on the main line to Goodletts, Tenn., on the Henderson division. Besides reducing curves and shortening distance, this cut-off will, between the points named, reduce the grade to 1 per cent. compensated for curvature opposed to northbound traffic and eight-tenths of 1 per cent. compensated for curvature opposed to southbound track.

In June of this year the company bought all the stock and bonds of the Louisville & Atlantic Railroad, which is 101 miles long from Versailles, Ky., via Nicholasville, Richmond, Irvine and Beattyville to Beattyville Junction. There is also a branch of about three miles to Idamay, Ky. At present this property will continue to be operated separately.

The company spent for additions and betterments, which were charged to income account, instead of to operating expenses, the sum of \$866,547, a decrease of \$823,921 as compared with last year. Of this, \$300,000 was for additional main tracks, \$134,000 for heavier rails, \$140,000 for station buildings and fixtures, about \$59,-



000 for right of way and station grounds, \$52,000 for widening cuts and fills, \$30,000 for bridges, trestles and culverts, \$18,000 for tunnel improvements, the balance covering a multitude of items relating to maintenance of way and structures. The company bought 10 locomotives, 9 passenger cars and 1825 freight cars during the year, and its total equipment now is locomotives, 899; passenger cars, 573; freight cars, 41,720; roadway cars, 1421. The average mileage operated was 4393.

The total assets are \$240,218,661, including cost of road equipment, etc., at \$169,304,201. The capital stock is \$60,000,000 and the bonded debt outstanding \$129,778,500. Current liabilities are \$14,546,205; contingent liabilities, \$10,879,000.

The road carried 24,403,952 tons of freight, an increase of nearly 5 per cent., and the number of tons carried one mile was 4,255,981,335. The earnings per ton per mile were .763 of a cent, while the net earnings were .242 of a cent, the former being a decrease of about 2 per cent. and latter an increase of over 64½ per cent. as compared with the preceding year.

### SANTA FE IN TEXAS.

#### Several Millions to Be Spent This Year for Improvements and Extensions.

F. G. Pettibone, vice-president and general manager of the Gulf, Colorado & Santa Fe Railway, which is the local corporation of the Santa Fe system in that State, is quoted as saying that the improvements contemplated by it, including extensions, in Texas this year amount to between \$10,000,000 and \$12,000,000. Regarding the proposed extension for handling iron ore he is reported as saying:

"We have joined some iron industry people to develop the iron fields of East Texas and dispose of the ore through Gulf ports. What the result will be I am unable to say. The details have not been worked out. It ought to be big transportation work out. It ought to be big transportation of capital into the State. It also means the employment of a good many men.

"If it is decided to build we will branch out between Longview and Center, or possibly from one of those points. The indications are that the Texas iron-ore fields are of sufficient extent to be worked for 100 years. I can't say any more about this, for the details are not arranged. Matters are in an indefinite shape at present."

Mr. Pettibone is further quoted as saying that engineers are now surveying and locating a route through the San Saba Valley to Brady, Tex., and between San Augustine and Sterling City, Tex. The company will build about 110 miles of new track in that territory. Besides that, it has prepared for its extensive improvements to all tracks, bridges and buildings, taking advantage of conditions when labor is plentiful to prepare for future business.

### NEW SEABOARD DIRECTORS.

#### Several Lines Absorbed by the System in Georgia, Alabama and Other States.

At a special meeting of the Seaboard Air Line, held last week in New York, John Skelton Williams of Richmond, J. William Middendorf and John B. Ramsey of Baltimore, Hennen Jennings of Washington, Franklin Q. Brown and L. F. Loree of New York were elected members of the board. Mr. Brown is vice-president of the Georgia & Florida Railway, of which Mr. Williams is president. Mr. Loree is president of the Delaware & Hudson Railroad, and represents the Harriman interests. Thomas F. Ryan of New York, James H. Dooley of Richmond and W. A. Garrett of Baltimore resigned. The other directors remaining are James A. Blair and Y. Van-

denberg of New York, W. B. Dunham of Boston, H. Rieman Duval, N. S. Meldrum, H. Clay Pierce and Norman B. Ream of New York, Townsend Scott and S. Davies Warfield of Baltimore, C. Sidney Shepherd, Ernst Thalmann and B. F. Yoakum of New York and George W. Watts of Durham, N. C.

The Seaboard has taken into its system the following branch lines or extensions which it already practically owned; Atlanta & Birmingham Air Line, 237 miles; Florida West Shore Railway, 20 miles; Plant City, Arcadia & Gulf Railway, 19 miles; Catawba Valley Railway, 22 miles; Tallahassee & Southeastern Railroad, 39 miles; total, 387 miles. This makes the system about 3000 miles long.

### New Equipment, Rails, Etc.

The Chesapeake & Ohio Railway has let contracts for 4000 hopper bottom gondola cars of 50 tons capacity each and they are now being built as follows: Standard Steel Co. of Pittsburgh, 2000; Pressed Steel Car Co. of Pittsburgh, 1000; American Car & Foundry Co. of St. Louis, 1000. In addition to this the company has ordered from the Standard Steel Car Co. four steel passenger cars and four steel combination baggage and passenger cars.

The Norfolk & Western Railway has recently placed an order for 32,000 tons of open hearth steel rail to be delivered next year. A press report says that this order is divided between the Pennsylvania Steel Co. of Steelton, Pa., the Carnegie Steel Co. of Pittsburgh and the Bethlehem Steel Co. of Bethlehem, Pa.

The Baltimore & Ohio Railroad has recently awarded contract for bridge steel to be used on the Philadelphia division as well as on other points of the system.

The Norfolk & Western Railway, according to a dispatch from New York, has sold \$2,800,000 of equipment trust certificates, the proceeds of which will be used for coal and other freight cars. The company is designing a new type of consolidation freight engine which will be a modification of its present Class M consolidation locomotive. It is also reported building 600 freight cars at its Roanoke shops.

The Pennsylvania Railroad's order for steel rails to be delivered next year was distributed as follows: United States Steel Corporation, 83,300 tons; Pennsylvania Steel Co., 41,800 tons; Cambria Steel Co., 41,800 tons; Lackawanna Steel Co., 19,550 tons; Bethlehem Steel Co., 13,910 tons. The Steel Corporation's share will be manufactured by the Illinois Steel Co. and the Carnegie Steel Co., the former making 56,200 tons and the latter 27,100 tons.

The Atlantic Coast Line has placed an additional contract for 15,000 tons of open hearth steel rail with the Tennessee Coal & Iron Co. at Ensley, Ala.

The Glen Rose & Walnut Springs Railroad Co., Glen Rose, Tex., is in the market for either a new or second-hand motor car and desires to hear from tie, rail and other equipment men.

The Sugarland Railroad, Sugarland, Tex., is reported to have ordered rail for six miles of line from the Carnegie Steel Co. and will purchase other material for 25 miles of spurs.

The Louisville & Nashville Railroad is building new freight cars at its shops at New Decatur, Ala., and a press report says that 1100 will be constructed. The company will also build 200 automobile cars.

The Tampa & Gulf Railroad, Odessa, Fla., is in the market for equipment.

The Capitol Traction Co., Washington, D. C., is reported to have ordered 30 pay-as-you-enter cars.

The Missouri & North Arkansas Railroad has ordered two 10-wheel locomotives from the Baldwin Locomotive Works, Philadelphia.

The Seaboard Air Line is reported to be getting prices on 20 locomotives and also on passenger cars.

The Pennsylvania Railroad, says a report, has ordered 96 steel passenger cars.

The Atlantic Coast Line is reported in the market for five steel passenger cars and 50 ballast cars.

The Texas Southeastern Railroad has ordered 50 flat cars of 30 tons capacity from the American Car & Foundry Co., St. Louis.

The Atchison, Topeka & Santa Fe Railway has ordered from the Baldwin Locomotive Works 20 locomotives, 9 being balanced compound Atlantic type and 11 Pacific type. These are in addition to 9 Pacifics and 18 Atlantics recently ordered.

The Atlanta, Birmingham & Atlantic Railway is reported in the market for 50 stock cars.

The Missouri Pacific Railway is reported to have ordered 65,000 tons more of steel rails from the United States Steel Corporation for delivery next year, this being in addition to 20,000 tons lately reported.

### An Oklahoma-Texas Enterprise.

The Salisaw, McAlester & Southern Railway Co. of McAlester, Okla., writes President J. E. Cavanaugh of McAlester, Okla., proposes to build from Salisaw, Okla., to Honey Grove, Tex., 190 miles, not including branches. The road will connect with the Missouri Pacific and the Kansas City Southern at Salisaw, the Midland Valley at Steigler, at Quinton with the Fort Smith & Western, at Featherston with the Missouri, Kansas & Texas and the Rock Island, at McAlester with the latter's Choctaw, Oklahoma & Gulf division, at Blanco with the Texas & Pacific, the Southern Pacific, the Santa Fe and the Missouri, Kansas & Texas, and at Honey Grove with the Frisco system. About one-third of the country through which the line will run is rolling, and it will also traverse the center of the McAlester coal belt, having 80 miles underlain with fuel. M. J. Smith of McAlester is a director and chief engineer of the company. He has two parties in the field, and construction is in progress south of McAlester by J. C. Wilkison of that place. The line is to be built with easy grades and track laid with 85-pound rail. The bridges are to be of concrete.

Besides running through the coal region, the line will traverse limestone and cement territory adjacent to the south. Bald Mountain, which Mr. Cavanaugh says contains an inexhaustible supply of iron ore, is within one mile of the road. Below is the new McGee Valley oil fields for 10 miles, besides deposits of asphalt and other minerals. There are also virgin forests of pine and oak timber.

The other officers of the company are William P. Freeman, vice-president; Andrew Ringland, assistant engineer, both at McAlester, Okla.; Arnold C. Saportas, Shirley M. Eaton and C. W. Youngman of New York and J. T. McCleary of Washington, D. C.

### Important L. & N. Line.

A letter from Rockport, Ky., to the MANUFACTURERS' RECORD describes in an interesting manner the Madisonville, Hartford & Eastern Railroad, which recently completed track from Madisonville, Ky., to Hartford and Fordsville. This is a Louisville & Nashville Railroad enterprise. From Madisonville, whence the L. & N. has a branch to Morganfield, it runs eastward, crossing the L. & N. line from Owensboro to Adairville; thence to Green

River at Smallhouse, and thence to Hartford. From there it runs to Fordsville, Ky., connecting with the Louisville, Henderson & Louisville Railroad, another L. & N. line. The roadbed and grade are superior. The ties are of the best, and the steel is 85 pounds to the yard.

It is pointed out that with the completion of this new line the Louisville & Nashville can build about six miles of road from Morganfield to Shawneetown, including a bridge over the Ohio River, and thus establish a very direct route from Louisville to St. Louis and the Northwest. The line as it now stands will also establish a more direct traffic route between Louisville and many points in the South and Southwest, besides giving a direct outlet for the products of vast coal fields to all markets. Besides this, it will furnish a connecting link in an important freight route north and south.

### San Antonio to the Rio Grande.

According to reports from San Antonio, Tex., considerable interest attaches to the railroad plans of J. F. Edwards, who has just closed a contract with San Antonio for a bonus of \$100,000 to build a railroad from that city to a point near Brownsville, on the Rio Grande. He is reported as saying that it is planned to continue the line to the City of Mexico, and rumor connects B. F. Yoakum of the Frisco system with the enterprise. Mr. Edwards has already started a railroad plan out of Jourdan, Tex., and survey is reported begun for the new line out of San Antonio. Mr. Edwards is further quoted as saying that 300 or 400 miles of railroad will certainly be built as the result of closing the contract. Actual construction must begin within 40 days.

### Mobile, Jackson & Kansas City Plans.

Concerning the recent foreclosure sale of the Mobile, Jackson & Kansas City Railroad and its northern extension, the Gulf & Chicago Railroad, a dispatch from New York quotes Charles K. Beekman, a lawyer, as saying that the reorganization committee, composed of himself, Brayton Ives, George R. Sheldon and John W. Simpson, intends to rename the entire line as the New Orleans, Mobile & Chicago Railroad and to build an extension to New Orleans. The \$4,000,000 bonds have been held by the Central Trust Co. of New York for the Mobile, Jackson & Kansas City Railroad and by the Trust Company of America for the Gulf & Chicago Railroad. Together they include 400 miles of line, the latter road being leased by the former for a practically indefinite term. The line extends from Mobile through Alabama and Mississippi to Middleton, Tenn.

### Glen Rose & Walnut Springs.

A. L. Sadler, Glen Rose, Tex., writes that the Glen Rose & Walnut Springs Railroad Co., has not yet elected permanent officers but work has begun; "the right of way is being cut out and grading is in progress. The line will be 12½ miles long from Glen Rose to Walnut Springs. Only three short bridges will be required over creek. T. M. Simpson, of Dallas, Tex., is engineer in charge, with headquarters at Glen Rose. A new or second-hand motor car is wanted, and it is desired to hear from tie, rail and equipment men, and from parties who would handle the bonds.

The Illinois Central Railroad has let contracts at New Orleans for four new warehouses, each about 80 feet by 155 feet. The Jefferson Construction Co. of New Orleans will do the work, and the contract price is about \$200,000. These buildings will be situated at the Poydras-street terminals.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

### The Beaver Dam Mills.

The Beaver Dam Mills of Edgefield, S. C., has about completed its additional building and arrangements for the additional 5000 spindles reported previously. This company's addition is a \$6000 structure, 80x80 feet, and its new machinery will cost about \$40,000. Its engineer in charge is J. E. Sirrine, Greenville, S. C.

### Will Add Spindles and Looms.

The Gonzales (Texas) Cotton Mill Co. has been incorporated with a capital stock of \$100,000 to continue the plant of the same name. It contemplates adding 2200 spindles and 50 looms, the present equipment being 5000 ring spindles and 150 looms. T. F. Harwood is president.

### The Oakdale Addition.

The Oakdale Cotton Mills of Jamestown, N. C., will build a two-story brick addition 103x200 feet and install machinery for manufacturing twine. This company was reported last week as to double its capacity.

### Textile Notes.

The Fort Valley (Ga.) Yarn and Hosiery Mill will increase its equipment of machinery. It now has 1400 spindles.

It is reported that the Canton (Ga.) Cotton Mills will build an addition and install 10,000 spindles, 300 looms, electric generator, etc.

The Board of Governors of the American Cotton Manufacturers' Association has selected Charlotte, N. C., as the place for the next annual meeting, in May, 1910.

D. A. Thompson, C. G. Smith, T. G. Callaway, J. E. Phillips and others of Covington, Ga., will form company with capital stock of \$100,000 to build a cotton mill.

The Magnolia Mills Co. of Concord, N. C., will build a 50x70-foot addition and install additional machinery. It now has 1800 ring spindles, etc., operated by electricity.

It is reported that the Wilson (N. C.) Cotton Mills will install additional machinery to change from coarse to fine yarn production. The company is operating 6234 ring spindles.

The Whittier Mills Co. of Chattahoochee, Ga., will add 5000 spindles and accompanying machinery to its present equipment of 10,000 ring spindles, 100 braidings, etc.

The fall meeting of the Southern Textile Association, composed chiefly of mill superintendents and overseers in departments of cotton mills, will be held at Raleigh October 20.

The Warioto Cotton Mills of Nashville, Tenn., will add machinery to increase equipment to about 25,000 spindles and 675 looms. This company is now operating 20,000 ring spindles and 540 broad looms. All the additional machinery has been purchased.

The Loudon (Tenn.) Hosiery Mill has awarded contract for the erection of a one-story addition and a two-story 80-foot building to present one-story structure, providing space for new machinery. The

company now has 108 knitting machines and accompanying equipment, and was previously referred to as having plans prepared by Baumann Bros., Knoxville, Tenn., for additions.

The Transactions of the National Association of Cotton Manufacturers at its annual meeting last April at Boston have been published in permanent form. They include not only the full text of general papers presented at the meeting, together with discussions bearing upon them, but also the splendid bibliography of the cotton-manufacturing industry, compiled by Dr. C. J. H. Woodbury, secretary of the association.

The Davis Hosiery Mills of East Chattanooga, Tenn., will build a plant at Winchester, Tenn. This company will award contract for the erection of a building 40x120 feet, with an ell 24x40 feet, of brick, with composition roof, concrete footings and foundations, plumbing, electric lights and electric freight elevator. The building will cost about \$8000. Huntington & Sears, James Building, Chattanooga, are the architects in charge.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### Maple and Walnut.

Thos. D. Fannin, Box 37, Hillsboro, N. C., wants to correspond with dealers in walnut logs and manufacturers of walnut and maple veneer.

### Lumber Notes.

During September building permits were issued in Houston, Tex., to an estimated value of \$1,322,210, which is said to be the best monthly record the city has ever made.

It is announced that the State Forestry Association of Louisiana, Mrs. A. B. Avehy, Shreveport, secretary, will hold a meeting in New Orleans on November 1 and 2.

The Nashville (Tenn.) Builders' Exchange will occupy new offices in the Noel Block after January 1, 1910. The present offices of the exchange are located in the Stahlman Building.

Building operations in Kansas City, Mo., for the first nine months of 1909 represent an expenditure of \$10,806,433, as compared with \$10,395,783 for the corresponding period in 1908.

### Machinery Wanted in India.

P. S. Unvala, K. Building, Frere road, Fort street, Fort, Bombay, India, writes the MANUFACTURERS' RECORD:

"I am glad to know that you are intent upon helping merchants to form connections with American makers. At present the public feeling in India being to buy, so far as possible, Indian-made goods, many industrial concerns have started or are about to start, and are in need of different varieties of machinery. I am glad to know from your MANUFACTURERS' RECORD that there are several firms dealing in second-hand machinery at your side, and shall be obliged if you will request such of them as deal in second-hand soap-making machinery of capacity to produce from five to six tons of soap per week, including steam boiler and engine of sufficient capacity, the smallest milling machinery, etc. If the complete second-hand plant is not found, please instruct them to send any separate machine or machines or engine, boiler, etc. Please note that I do not want them new; also I want both new and second-hand complete plants on small scale for making toilet requisites, menthol pastilles and cloth-weaving machinery of different variety."

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

### American Products in Denmark.

K. Larsen & Comp., Kiøbenhavn, Copenhagen K, Denmark, writes the MANUFACTURERS' RECORD:

"There are many things that would be liable to be introduced into Denmark to mutual interest, but American manufacturers make so much trouble to get their goods that it is impossible to get any profit by selling it here. Germans do all foreign business here (nearly), as they are quoting liberal terms and often establish branch houses, and that is the way Americans should do. The business man in Denmark is generally to be relied upon better than in many other countries, so that American manufacturers need not run much risk giving goods to a reliable firm (wholesale) in Copenhagen (free port) in consignment. We have a law in Denmark that secures the consignee very much in case of risks. The American manufacturer must have his money secured, but he must also think not to make the buyer here impossible to live. The American always demands cash against documents, and the buyer here can only sell on three months' credit. Consequently, such terms made so much trouble that it is nearly impossible to compete with the Germans, who sell at three months, and from their branch houses here in Copenhagen can give goods in consignment again. German goods are cheap, and it is not everyone that buys German goods that is able to see that it is better quality from American or English products. We wish a good connection in America for electrical supplies on commission. We think America has had its season for many years in these things, while it is somewhat new here, and we think they are cheap in America, perhaps cheaper than in Germany, although much better quality. But there must be announced something in the newspapers here; announcements in newspapers are very cheap here compared with prices in America. We also could make use of boots, shoes, tools, mowers, forks, etc. The reason we are not using more American goods here is generally because we cannot get them here so easy as from other foreign countries. Copenhagen, with its free port, is central from Scandinavia and Finland and for the north of Russia, and we have steamers running to East Indies every week, so that Copenhagen must be a very good place to establish a branch house of American manufacturers. We Danes never like German goods so much, but it is easy to get them here in all lines. Goods from America have a very good reputation here. We are sure there are many things made in America that would sell here quickly and give satisfaction to the trade. We shall be glad to correspond with you at any time and give you information regarding the introduction of American goods in Scandinavia, especially in Denmark."

### Quarrying Machinery, Mill Supplies, Etc.

W. Shedden Paxton, Calcutta, India, writes the MANUFACTURERS' RECORD:

"I wish to receive from bona fide makers of quarrying and stone-working machines and appliances their complete illustrated price-lists in duplicate of all machines, appliances and tools for up-to-date and speedy quarrying, working and finishing, marble and granite blocks, sets, slabs, road metal and the like. With all ma-

chines must be quoted the rock-bottom price, packed and delivered f. o. b. New York; the weight, area covered by the machine, power machinery to work it and labor necessary for attendance, and lastly, its capacity in work per hour. No lists will receive attention unless all these particulars are given. Postage should be paid in full, and neither letters nor price-lists will be received which are not paid for in full. I am also prepared to negotiate with large, sound, reliable and competitive makers of mill stores, such as beltings, lubricants, packings, etc., to act as their sole agent in the British empire, in Asia, etc., to push their goods in this market. Stocks can be held in various centers upon special terms, as is usual out here, and incidents from buyers would be paid for by cash against documents in U. S. A."

### Wanted in India.

Jirosha S. Unvala, K. Building, Frere Road, Fort street, Fort, Bombay, India, writes the MANUFACTURERS' RECORD:

"I beg to inform you that many gentlemen here who intend starting factories want to join with them chemical laboratories. So I shall thank you to instruct makers of chemical instruments and appliances to send their illustrated price-lists and kindly further instruct them to send separate lists of instruments and apparatus necessary for a moderate size laboratory in factories for soap, toilet requisites and candles. I also want second-hand machinery for small-scale factories for soap, candle, toilet requisites, textile weaving, vegetable butter and menthol pastilles, and complete new plants on small scale for toilet requisites, menthol pastilles, textile weaving, candles."

### Metal Casings, Celluloid, Typewriters, Etc.

J. Mendelsohn, Lodz, Russia, writes the MANUFACTURERS' RECORD:

"I will have Josepi Spiero of New York send you the price of a year's subscription to your publication and ask your aid as far as possible in getting into communication with manufacturers who wish to do business here. I asked you in my letter of August 19 for names of firms which make perforated metal casings. I ask you again to do what you can for me in that line. Is there but one celluloid manufactory in America? Have you in America some large factories making writing machines, office furniture, sewing machines for leather, etc.? Tools of all kinds are greatly in demand here. I can do good business in all that."

### Well-Drilling Machinery.

Louro M. Guerra y Hermano, Apartado Postal 540, Mexico City, writes the MANUFACTURERS' RECORD:

"We desire to purchase a lot of well-drilling machinery, and will ask you to put us in touch with some of the reputable manufacturers of this class of machinery, asking them to quote us their lowest prices, immediately direct on all sizes that they manufacture, giving all weights and all information."

### Belting and Packing.

George H. Alexander, Doe street, Birmingham, England, writes the MANUFACTURERS' RECORD:

"I have applications from time to time for first-class engine packings and belting of every description. If you have among your advertisers any first-class firms whose prices are right and whose goods are right, looking out for foreign trade, kindly put me in communication."

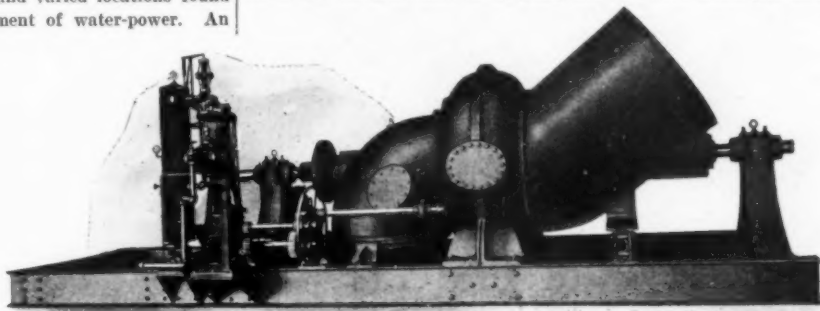
The Ohio Valley Improvement Association is to meet at Cincinnati October 14-15.



## MECHANICAL

### Recent Improvements in Trump Turbines.

To keep pace with the times and to introduce machinery embracing valuable improvements in the water-power line has been the aim of the Trump Manufacturing Co., manufacturer of the Trump turbine, Springfield, O. This company has striven to give the user of water-power the highest possible efficiency in its machinery, and has carefully gone over the construction of turbines with a view to giving the best results obtainable from the conditions that must be contended with from the numerous and varied locations found in the development of water-power. An



THE TRUMP HIGH-HEAD TURBINE.

accompanying view illustrates the Trump scroll-type high-head turbine. This turbine has been designed for heads ranging from 30 to 400 feet, and is so designed that the water is guided onto the turbine runner in a uniform rotary motion. The rotation of the water is obtained through the construction of the crown plate of the turbine proper. This crown plate is made cone-shaped, and upon same are cast spiral vanes. The water is delivered onto the turbine parallel to the shaft. It is a well-known fact that where the water is delivered onto a turbine at right angles to the discharge, or at right angles to the shaft passing through the turbine, there is more or less eddying and more or less indirect pressure brought to bear on one side of the turbine casing, the result being that the water enters the gates direct on one side and indirect on the opposite side. This objectionable feature has been dispensed with in the turbine above illustrated.

The gate mechanism in this wheel and the gates are made of phosphor-bronze, and are operated by ring passing entirely around the outside of the water-wheel casing proper, or, in other words, around the periphery of the wheel gates, and is so constructed that the gates are operated without the use of any link connections which in practice have been found to be a continuous source of trouble, and in which there is more or less lost motion.

The end thrust in this type of turbine is entirely eliminated through the use of the Trump patented water cushion, which is practically frictionless, and its operation is automatic. Through the use of the water cushion no wooden thrust blocks or other mechanical thrust bearings are employed.

The simplicity of the turbine and the small number of working parts have made its construction ideal, and the merits are readily recognized by mechanics.

A number of other valuable improvements, both in high and low head turbines, have been made by the Trump Manufacturing Co., and a more concise description of them has been issued. The book contains illustrations and descriptions of turbines of all types and sizes.

#### Thomas Elliptic Grate Bars.

A grate bar of elliptical shape adaptable for use with every kind of fuel and for all

kinds of furnaces and fire-boxes where any other grate bar is used has been invented and patented by Ed. L. Thomas of Valdosta, Ga.

The Thomas elliptic grate bar was designed to give a long life under adverse circumstances by having two oppositely curved bars joined together with connecting and spacing lugs at intervals of three inches, and having one-third contact and two-thirds air space, the heat of the top bar that would be transmitted to the lower bar through the connecting lugs is radiated from the lugs by a circulation of air around these lugs, and this radiated heat is drawn up into the furnace. This prevents the radiated heat from going into

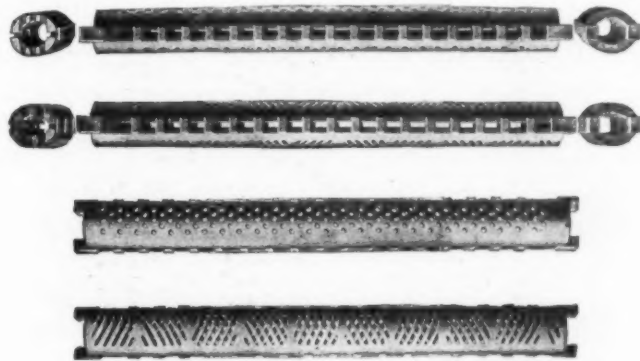
formation of clinkers, the most serious enemy known to a steam plant, by expelling the molten clinker-making matter from the bars in its molten state, as the bars have no flat surface for this molten matter to lie on and burn and gather to itself, but rolls off the ellipse surface in the form of a cinder down between and through the bars into the ash pit, thus leaving the fuel and fuel-supporting surface clean, with the draft spaces all open to receive fresh fuel; thus they secure a perfect draft, a clean, fresh, hot fire at all times, which produces the greatest number of heat units from the least given quantity of coal, eliminates all steam troubles by having an even steam pressure, and effects a sub-

stantial saving in the cost of fuel for the operation of the plant.

The elliptic bars are so simple in construction that they can be used in any furnace with any other style standard bar, or can take the place of any other style standard bar without the necessity of changing the rigging. They are made for use either as stationary or rocking grates, so as to make them adaptable for locomotives, steamboats or any kind of boiler with any kind of furnace or fire-box.

Mr. Thomas is now manufacturing his elliptic bars at Valdosta, but is planning to move to Birmingham to establish his main office and factory. He has arrangements to manufacture them also in Norfolk, Va., and plans plants in all important centers.

Here with are views of the Thomas coal



THOMAS ELLIPTIC GRATE BARS.

the surface of the bars, giving a uniform fire at all times, consequently an even steam pressure, with no dragging for steam, and is accomplished with less fuel and labor.

For plants using coal the bars are invaluable from several standpoints. While they cannot be made reversible, they have a greater depth on the fuel-supporting surface, with the bottom made skeleton to allow all impurities to drop through, and retaining the ellipse shape to protect the life of the bar.

The most valuable feature is they are self-cleaning, shedding all slate and impurities to the troughs between the bars, where they do not seriously interfere with the main draft spaces, but are easily removed in cleaning. They eliminate the

and sawdust bars. For further particulars address the Thomas Grate Bar Co. of Birmingham, Alabama.

#### Necessary in Good Roads Building.

By HARRY TIPPER.

Political parties, business organizations and taxpayers, from farmer to automobilist, are all in favor of good roads. There is good reason for this movement. It is a matter of economy. We are wasting enough money annually on account of the absence of good roads to build an appalling mileage if an equivalent amount were devoted to that purpose. Naturally those parts of the country more recently developed are those which need the rapid extension of good roads more than others.

The question of the wisest expenditure

for the building of good roads is not so rapidly determined. Any improved road is better than none at all, and the amount to be expended on an improved road must be considered in relation to the traffic requirements of the district in which the road is to be built and the most economical means to be adopted. Modern traffic, with its increasing use of fast moving self-propelled vehicles, has introduced a problem into road-building which has made some older methods of building roads entirely incapable of economical maintenance. Around larger cities which have boasted a certain proportion of broken stone and similar roads, the rapid destruction of roads and the enormous sums necessary to be expended upon them yearly in order to maintain them in fairly good condition have shown the road builder and engineer that it is necessary to introduce some other method of construction. Along with this rapid destruction has come the dust nuisance to such an extent as makes it necessary to eliminate it. In the course of investigation and experiments which road builders have been making where the traffic is heaviest and where the destruction of the road has imposed the largest burden of maintenance, a number of different materials and methods of construction have been tried with varying degrees of success. Road builders and engineers have generally reached the conclusion that, in order to meet the requirements of present-day traffic, roads must be constructed with proper regard to efficient drainage of the foundation, the proper construction of the stone road itself so as to form a base of the greatest stability, and the use of some soft, adhesive asphaltic material for binding together the surface course of stone. Too much attention cannot be paid to proper drainage, so that the road itself shall not be subjected to the disintegrating effects of water in the subgrade and reaching the foundation. This is particularly important where the subsoil is of water-bearing character. It is also necessary that the stone which forms the road proper be arranged as to size in construction, so that the least amount of movement occurs.

The old method of binding the surface with water and screenings has been found inadequate. The surface becomes stripped under the shearing action of the automobile tires, the small screenings and dust are blown away and the loose stone is rapidly thrown out of the road.

In the introduction of a soft, adhesive material into the surface course of stone, binding it together, the possibility of the automobile tearing away the surface is practically eliminated. The asphaltic material, being of an adhesive nature, binds the stone together so that the force exerted by the automobile tires has no effect in stripping the road, and the small surfacing screenings are firmly bound together with this material, so that the tendency to lift them as dust is resisted. Thus the wear on the surface of the road is reduced to a minimum.

A good asphaltic material of the proper consistency retains its adhesive binding qualities for a considerable time, and the only wear on the road surface is the slight attrition from moving traffic. The newer methods of construction with the asphaltic material are commonly referred to as the penetration and the mixing method. The penetration method consists in constructing the stone base of the road, as heretofore, and the surface course, omitting the screenings and the washing of water. The road is thoroughly rolled and the soft bitumen, previously heated so as to flow freely, is applied to the extent of one gallon to a gallon and a half per square yard, according to the requirements, in order to fill the voids flush with the surface. Following immediately on this application the

surface coat of screenings is spread to about one-quarter of an inch thick over this bituminous application and rolled in with the ordinary macadam roller.

The mixing method (used only to a certain extent) is accomplished by bringing the ordinary stone construction to within two or three inches of the grade required and then mixing graded stone in a suitable mixing device without heating, with sufficient soft bitumen previously heated to thoroughly coat all the particles. This material is spread on the road to the required

#### C. & G. Cooper Gas Engines.

The C. & G. Cooper Company of Mt. Vernon, O., became convinced several years ago that in certain fields of work a thoroughly practical gas engine would prove advantageous. A careful investigation of the gas-engine situation in this country and in Europe was immediately begun, and the company decided to design its own gas engine and unite, if possible, all the best engineering features which modern practice had proven to be sound and desirable. Martin A. Thiel, the well-known gas-

distance and with equal resistance to the respective intake valves of the cylinders. The mixture in all cylinders, therefore, must be identically the same in volume and composition under all conditions of load. Upon a similar principle the cooling water is introduced into the piston rods from a central point, and passes through each piston and piston rod without reversing the flow to the outlets at the forward and rear ends of the engine. The overhanging counterbalanced type of crank has been adopted. The bed is of the

no ribs, and float on hollow rods between the main, intermediate and supplementary crossheads. The rods are nickel-steel forgings, and are drilled for water circulation and forced into the pistons. The cylinders are one-piece barrels, with inlet and exhaust chambers bolted to them, so as to remove all cooling strains in the castings. The water-jacket is closed at its center by a belt in three segments. The cylinders are supported only at the ends by the main bed and guide castings, and as the piston and rods are carried by their respective crossheads, the cylinder barrels are permitted to expand and contract with freedom. The exhaust piping is of flexible construction throughout, insuring free movement for expansion and contraction due to changes of temperature. The ignition is of the "make-and-break" mechanically-operated type, and two or more igniters are operated simultaneously at each end of each cylinder. This system is connected with a safety stop, which automatically breaks the electric circuit when the engine speed exceeds 10 per cent. above normal, or the cooling water supply fails. The engine is regulated by varying the quantity of a constant mixture controlled by the governor through an automatic relay. The lay shaft is driven by spur and bevel gears. It is supported by bearings on the engine bed and base plates, thus avoiding the common practice of supporting it on bearings from the cylinders, where they are subjected to temperature changes, or from the foundation, where it is difficult to maintain proper alignment. This self-contained construction has the additional advantage of permitting the removal of the cylinders without disturbing the lay shaft bearings. The inlet and exhaust valves at either end of each cylinder are actuated by a single eccentric on the lay shaft. The exhaust valve is of the separate cage water-cooled type. The gas regulator is of a special oil-sealed enclosed construction, with balanced valve.

The construction details common to all reciprocating engines, such as bearings, connecting rods, etc., have been worked out with unusual care and skill. The machine will doubtless sustain, if not advance, the high reputation already held in the engine field by the C. & G. Cooper Company because of its steam engines. Single-tandem and double-tandem unit Cooper gas engines will be built of from 150 to 3000 horse-power capacity. See two accompanying views.

#### The Howell Topping Road Oiler.

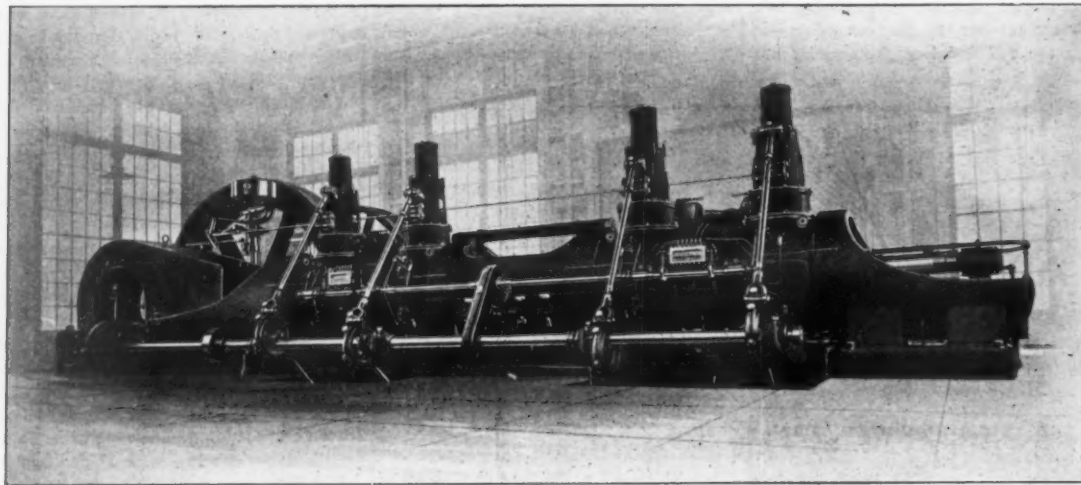
The oiling of roads has become a large factor in the suppression of dust and the building of macadam roads. Asphalt macadam is now being extensively constructed, and the results obtained in this direction are proving satisfactory.

The most serious problem that has confronted the engineer and contractor in the use of a bituminous binder has been to evenly distribute the asphalt or tar oil. Formerly this was largely done by hand, but with the invention of the Topping oiler the labor for distributing has been greatly decreased and the results obtained more uniform.

This machine was invented by a contractor who found that he must design a machine of his own in order to produce the results he was after. After spending considerable money and time in designing a machine he decided to place it on the market.

The machine is under the entire control of the operator, who can shut off, decrease or increase the flow of oil at will. The machine is "fool proof," and can be operated by an ordinary laborer.

It is designed to fit a twin hose cart, or by a slight change in the piping it can be



C. & G. COOPER GAS ENGINES.

thickness and rolled. If the surface requires it, it is usual to apply a light application to the surface of the road, and then the screenings are added and rolled in.

These methods of construction increase the expense over the ordinary stone-macadam roads, and are justified only by the reduction in the heavy maintenance cost which can be secured by the more expensive method of construction, the point being that the increased first cost necessary to apply the bituminous binder to the surface course of stone is more than compensated for by the practical elimination of the heavy maintenance cost for a number of years.

Where the traffic is of such a light character and the district so thinly populated much expense would not be warranted in building roads. This method of construction would be out of place, as the ordinary sand-clay or some similar road would probably be sufficient for the cost of the district. Sand-clay and other roads of a similar type suffer from the rapid erosion due to washing by rains, etc., and as the needs of a district grow, and especially around all towns where the traffic begins to be improved, the stone road, properly constructed with a soft bituminous binder, seems to be the only solution for a road which will withstand the heavy action of modern traffic and is not entirely unreasonable in first cost.

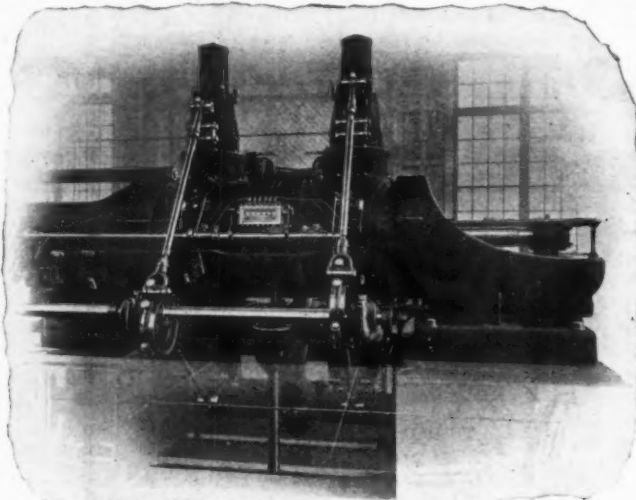
The extra cost of incorporating a bituminous binder in the surface course of macadam road is naturally dependent largely upon local conditions. The additional cost has been found to vary in the Eastern States from 20 to 30 cents per square yard, which would mean an additional cost of from \$1500 to \$2000 per mile on a road of the average width.

It is evident that with the improved equipment, which is beginning to be made, these costs will be reduced within the next few years. But experience has shown that, with the additional cost as it stands at present, the advantage in the elimination of the dust and the preservation of the road is sufficient to prove the new method of construction valuable and indeed necessary.

engine expert and designer, was selected to supervise this important work. A German engineer of broad technical training, Mr. Thiel's many years of experience in designing and building some of the largest and most successful gas engines operating in this country especially fitted him to accomplish the desired result. Mr. Thiel's wide experience also in operating large gas-engine plants has proved valuable in solving with originality and skill many of the problems of gas engineering, such as ignition, timed lubrication, cooling and regulation.

Little publicity has been given the ex-

heavy-duty rolling-mill type, having an open top, permitting access to the cross-head and easy removal of the cylinder head and piston through the bed. The bed is rigidly bolted to the foundation, while the distance pieces and tail-rod supports, which are of cylindrical construction, rest on base plates in machined ways. The main bearing is of special design. The lower shell rests in a bored seat, and may be easily removed after relieving it of the weight of the shaft. This shell is babbitted and cored for water-cooling. The side gibs are provided with wedge adjustment on either side, and are lined with babbitt.



C. & G. COOPER GAS ENGINES.

tensive gas-engine developments being carried on by the Cooper Company pending endurance tests in service of the new machines. The Cooper gas engine is now a demonstrated success. Its regulation, running qualities and general reliability are claimed to be equal to that of a steam engine of the highest grade and the thermal efficiency as superior to that of the steam engine.

The Cooper gas engine is a double-acting four-stroke cycle machine, working on the constant-mixture principle. Both the air and gas are distributed from the center of the engine, so that they travel an equal

The cap is babbitted at the ends only, and is used to clamp the quarter boxes and the bottom shell into place. In addition there is a transverse rib on either side of the cap extending the length of the bearing, which provides a retaining wall for the oil and compels it to enter the bearing above the side gibs. The crosshead is fitted with an improved flat shoe, the top face of which is bored to allow the crosshead pin to align itself with the crank-pin should the latter be thrown out of the horizontal plane by shaft deflection. All pistons and piston rods are the same, and are interchangeable. The pistons contain



attached to any cart. This a mechanic in the field can do.

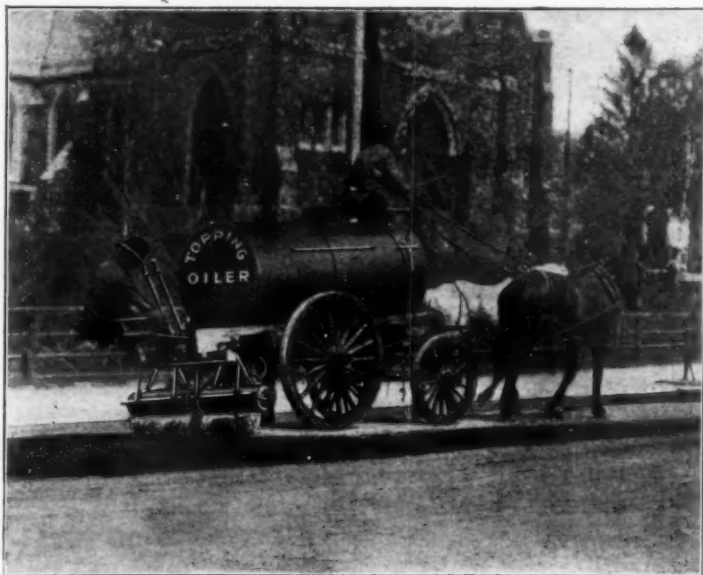
It consists of two cylinders into which the oil flows. These cylinders are fitted with internal valves, which by a clever arrangement of levers shut off the flow or increase it at will. The range covers about 20 different quantities of oil that can be spread, and the machine has put on one

### Steele System of Drying Brick.

Drying brick is one of the troublesome problems of brick-making.

There are few clays that will make good brick if they are not dry when they get into the kiln. The cost of handling is also important.

J. C. Steele & Sons of Statesville, N. C., have given this subject much attention,

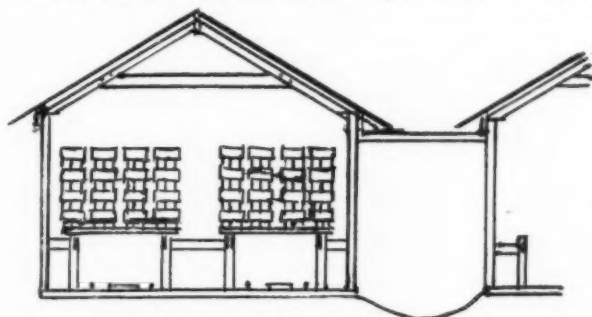


THE HOWELL TIPPING ROAD OILER.

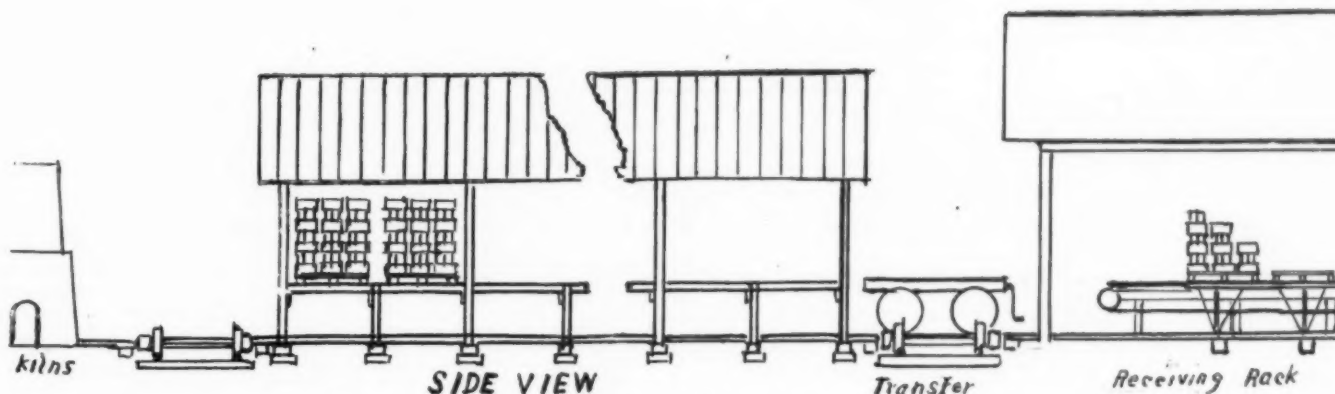
and one-third gallons per square yard with one trip of the cart over a given road. It has also put on less than one-quarter gallon per square yard. The quantity depends somewhat on the viscosity of the oil. The oil may be spread six feet wide or three feet wide.

The oil, after leaving the cylinders, strikes a steel plate, which spreads it out

and have come to the conclusion that for most of the Southern brick-makers, where it is not absolutely necessary to run through the winter, the lift car system, with properly designed sheds, giving a free circulation of air under the brick, and with spaces for air and sunshine between the sheds, is the best and cheapest. Further the firm says: "They (bricks)



END VIEW



STEEL'S SYSTEM OF DRYING

in a sheet, thus assuring that it will not deposit in streaks, but cover the road surface uniformly.

There are no stuffing-boxes or leathers of any kind to wear out.

The machine is manufactured by Howell Topping, 13 Park Row, New York. See accompanying illustration.

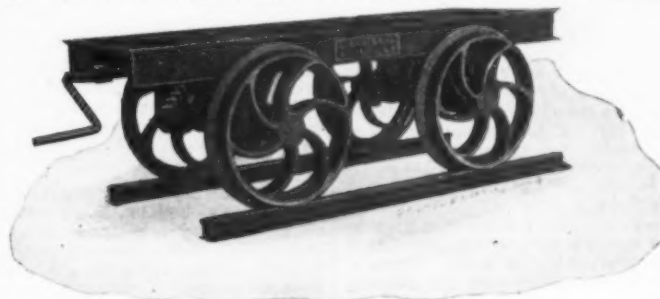
can be handled just as cheap with these lift cars as in a drier. The cost is something like one-third that of a drier, depending on conditions, and the cost for fuel is nothing. A few steam pipes can be put in the sheds to keep brick from freezing, so work can begin earlier and continue later, only having to shut down

for the coldest part of the winter. The depreciation will not be so great as with a drier.

We claim most positively that we have the best equipment for this system, and one man can handle from 30,000 to 50,000 brick per day.

"Often old sheds can be changed so as to use this system."

Herewith is a drawing of the Steele system, showing how the sheds are constructed and how the system operates. The turntable pallet support is placed beside the delivery table, and the two pallets are placed on it and the bricks hacked on



THE STEELE LIFT CAR.

them. The support revolves to facilitate hacking. The lift car is then run under the hacks and the load of 400 brick is lifted and run out on the transfer, which transfers it to any one of the shed tracks, where the hacks are deposited on rests.

Another lift car and transfer car is used at the other end of sheds to take the dry brick into the kilns, where the hacks are deposited on the kiln racks, from which they are tossed to the setters. A shelf is provided for the tosser to stand on, making it much easier to do the work.

The Steele lift car (illustrated herewith) is used on a 24-inch gauge of track. It has few parts, and these are strong. Dustproof roller bearings are provided;

## MINING

### The Black Mountain Corporation.

The Black Mountain Corporation now has a number of operating companies developing leases on a royalty basis, the present annual output being about 2,000,000 tons of coal. The company owns 35,000 acres of coal land in the Black Mountain district, lying largely in Lee county, Virginia, with a small portion in Harlan county, Kentucky. This property is reached by the Louisville & Nashville and Southern railways, and contains 12 workable seams of coal. Black Mountain is

part of the Cumberland range, and it is stated that the coal is of the highest grade for steaming and coking. The principal office of the company has not as yet been established, but will be located at either Bristol, Tenn., or Washington, D. C. Chas. H. Zehnder, 140 Cedar street, New York, is vice-president.

### Mining Notes.

Messrs. J. R. Sigler and V. G. Conley of Henderson, Ky., are reported to have purchased the Magnolia coal mines, together with 2000 acres of land, for a consideration of \$20,000.

Messrs. J. B. Richardson, J. W. Manier, Sr., J. W. Manier, Jr., all of Nashville, Tenn.; J. F. Pembroke, Barnett, Ky.; S. J. Lawry and F. M. Jones, Hopkinsville, Ky., have incorporated the Empire Coal & Coke Co. of Hopkinsville with a capital stock of \$100,000.

The Graham Coal & Coke Co. of Morgantown, W. Va., has incorporated with a capital stock of \$300,000. Its incorporators include E. M. Everly of Morgan-

town, W. J. Johnson, George C. Gans and S. M. Graham, Uniontown, Pa., and associates.

The Rock Springs (Ala.) Coal Co. has incorporated with a capital stock of \$60,000. Its officers are William Job, president; David B. Wallace, treasurer, and William B. Grubb, secretary.

The Interstate Cotton Seed Crushers' Association will hold its next annual convention at Little Rock, Ark., in May, 1910.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

### BRIDGES, CULVERTS, VIADUCTS

Ark., Batesville.—Independence county has appropriated \$9000 for construction of steel bridges. Address Independence County Commissioners.

Ark., Heber.—Cleburne county appropriated \$2115 for construction of bridge across Little Red River; Wm. Carey, County Judge.

Ark., Nashville.—Howard county has made appropriation for erection of five steel bridges. Address Howard County Commissioners.

Ark., Pine Bluff.—Memphis, Paris & Gulf Railroad, H. C. McClure, chief engineer, Nashville, Ark., and Arkansas, Louisiana & Gulf Railroad, J. M. Parker, general manager, Hamburg, Ark., have each petitioned city for permission to erect bridge across Arkansas River.

Ark., Waldron.—Scott County Quorum Court authorized construction of bridge at Waldron and Bates, Ark.; \$8000 available. Address Scott County Commissioners.

Fla., Palatka.—Converse Bridge Co., Chattanooga, Tenn., is proceeding with construction of highway bridge over St. John's River at Palatka; contract price \$43,000.

Ga., Brunswick.—Glynn and McIntosh counties will vote in November on issuance of \$50,000 bonds for erection of two combination bridges lately mentioned. Address Glynn County Commissioners at Brunswick or McIntosh County Commissioners at Darien, Ga.

Ga., Savannah.—City accepted proposition of Atlantic Coast Line Railway, J. R. Kenly, general manager, Wilmington, N. C., for construction of two subways; estimated cost \$20,000.

Miss., Natchez.—Natchez & Southern Railway, E. G. Merriam, president, St. Louis, Mo., will construct \$5000 steel bridge over St. Catherine street.

Tenn., Knoxville.—City Council adopted revised plans for Aylum-avenue viaduct and instructed engineers to prepare specifications from which bids for construction can be received from contractors not later than November 1; structure will probably be of reinforced concrete and 1100 feet long; W. H. Burk of Knoxville is consulting engineer; John P. Murphy, chairman Viaduct Committee. (Recently mentioned.)

Tenn., Memphis.—Ennis M. Douglas, City Register, received bids October 7 for construction of reinforced concrete bridge at Bayou Gayoso, on Winchester avenue, and for reinforced concrete culvert on Webster avenue. Lately mentioned. (See "Machinery Wanted.")

Tenn., Shelbyville.—Bedford County Commissioners awarded contract to Nashville (Tenn.) company to construct bridge over Duck River and appropriated \$5599.

Okla., Durant.—City will vote October 19 on issuance of \$50,000 bonds for erection of steel bridge, construction of settling basin for water-works system and for installing electric-light plant. Address The Mayor. (Recent election declared invalid.)

Va., King William.—King William county will construct steel bridge over Harrison Creek; abutments to be of concrete; length 38 feet, width 12 feet, height 7 feet from bed of creek; plans and proposals will be opened November 1; B. C. Garrett, clerk. (See "Machinery Wanted.")

Va., Norfolk.—W. W. Gwathmey Engineering Co., Norfolk, is lowest bidder at \$3980.80 for construction of concrete bridge on Union causeway.

Va., Richmond.—Board of Supervisors of Henrico county, W. C. Saunders, chairman, awarded contract to E. J. Heaton, Richmond, for construction of proposed reinforced concrete bridge over Horse Swamp; materials ordered.

W. Va., Elkins.—Randolph county will construct steel bridge across Leading Creek and make such changes in abutments already constructed as may be necessary; bids to be opened October 15; S. A. Rowan, clerk. (See "Machinery Wanted.")

W. Va., Wheeling.—Board of Control, D. G. Brown, clerk, will receive bids until October 16 for steel work on superstructure of Market-street bridge (steel girder, encased in concrete), and until October 25 for concrete work; contract recently noted awarded to Nelson Merydith Company, Chambersburg, Pa., for substructure of bridge.

W. Va., Logan.—Company organized, it is reported, to develop coal properties on lands of J. W. Reed on Island Creek.

W. Va., Matewan.—Red Jacket, Jr., Coal Co. will develop coal mines; reported to build twin tipples.

W. Va., Morgantown.—Graham Coal & Coke Co. incorporated with \$300,000 capital stock by E. M. Every of Morgantown; W. J. Johnson, George C. Gans and S. M. Graham, Uniontown, Pa., and others.

W. Va., Welch.—Shamrock Coal Co. incorporated with \$15,000 capital stock by A. Z. Litz and R. R. Smith of Welch, J. P. Riley and J. S. Riley, both of Hallsville, W. Va.

### CANNING AND PACKING PLANTS

Ala., Montgomery.—The Commercial Club is promoting establishment of cannery by Ohio capitalists; cost \$12,000.

Fla., Dade City.—Company organized with F. S. Daiger, president; J. C. Griffith, vice-president; R. L. Chamberlain, secretary; W. I. Porter, treasurer; will establish fruit-packing plant; awarded contract for erection of building.

Tenn., Knoxville.—Armour & Co., Chicago, Ill., awarded contract to Davis Getaz, Son & Co., Knoxville, for remodeling present plant and erecting addition; plans call for three brick smokehouses; three stories; concrete basements under entire building; cost of improvements, \$15,000.

### CLAYWORKING PLANTS

Ala., Queenstown.—Brick—Houck Bros. will establish plant with capital stock of \$25,000 to manufacture shale brick; address, care of The Queenstown Company, 213 First Ave., Birmingham, Ala.

Tex., Aransas Pass.—Press Brick—Aransas Pass Pressed Brick & Shingle Co. incorporated with \$2500 capital stock by T. C. Whitehead, W. F. Stegall and O. C. McLeod.

### COAL MINES AND COKE OVENS

Ala., Rock Springs.—Rock Springs Coal Co. incorporated with \$60,000 capital stock; William Job, president; David B. Wallace, treasurer; William B. Grubb, secretary.

Ky., Henderson.—J. R. Sigler and V. G. Conley purchased for \$20,000 and will develop Magnolia coal mines, including 2000 acres of land.

Ky., Hopkinsville.—Empire Coal & Coke Co. incorporated with \$100,000 capital stock by J. B. Richardson, J. W. Manier, Sr., J. W. Manier, Jr., all of Nashville, Tenn.; J. F. Barnett, Pembroke, Ky.; S. J. Lawry and F. M. Jones, Hopkinsville.

Md., Lonaconing.—Messrs. Fahey, Westernport, Md., purchased and will develop coal rights of American Coal Co. near Lonaconing.

Va., Stonega.—Stonega Coal & Coke Co. will build 35 additional beehive coke ovens.

W. Va., Coalton.—Davis Colliery Co., main office Elkins, W. Va., will construct 50 coke ovens at Coalton; improvements include new siding, track and coke-drawing machine.

W. Va., Beckley.—Spruce Coal Co. incorporated with \$2,500 capital stock by T. E. Bibb, B. Carter, G. C. Hendrick, W. H. Rader, all of Beckley, and W. G. Caperton, Slab Fork, W. Va.

W. Va., Bluefield.—Virginia Iron, Coal & Coke Co., Bristol, Tenn., is planning development of two mines which have been idle.

W. Va., Farmington.—W. P. Ely and E. L. Denny of Waynesburg, Pa., purchased for \$26,840 and will develop 986 acres coal lands; also purchased for development 504 acres at \$80,640.

W. Va., Logan.—Company organized, it is reported, to develop coal properties on lands of J. W. Reed on Island Creek.

W. Va., Matewan.—Red Jacket, Jr., Coal Co. will develop coal mines; reported to build twin tipples.

W. Va., Morgantown.—Graham Coal & Coke Co. incorporated with \$300,000 capital stock by E. M. Every of Morgantown; W. J. Johnson, George C. Gans and S. M. Graham, Uniontown, Pa., and others.

W. Va., Welch.—Shamrock Coal Co. incorporated with \$15,000 capital stock by A. Z. Litz and R. R. Smith of Welch, J. P. Riley and J. S. Riley, both of Hallsville, W. Va.

### CONCRETE AND CEMENT PLANTS

Md., Arlington.—Garrison Concrete Stone & Lumber Co. organized with \$10,000 capital stock; Mortimer W. West, president, 223 St. Paul St.; Thos. J. Flannery, vice-president, Oak and Hamilton Aves.; G. H. Haynes, secretary and treasurer, Belle and Garrison Aves.; will establish plant for manufacturing concrete blocks, brick, ornamental posts, etc.

Md., Security.—Maryland Portland Cement Co., 820 Equitable Bldg., Baltimore, Md., has determined all details for recently announced betterments; increase capital stock from \$400,000 to \$800,000 and daily output from 800 to 2400 barrels Portland cement; improvements include erection of steel and concrete stockhouse, 100x200 feet, costing \$45,000; installation of two kilns, 128 feet long and 8 feet in diameter; addition of 1200-horse-power steam turbine to 1400-horse-power steam engine now used; installation of all necessary equipment; will erect crusher to furnish stone for cement making, ballast, etc.; complete enlargements by May, 1910; engineer in charge, F. H. Lewis, Leeds, Ala.

Company also proposes change of title to Security Cement & Lime Co. and contemplates building at Martinsburg, W. Va., plant for manufacturing lump lime, hydrated lime and other lime and stone products; daily output of lump lime, 2000 barrels; plan involves taking over Berkeley Limestone Co. at Martinsburg. Dr. Lazell of Charles Warner Company, Wilmington, Del., will be engineer in charge. Security Cement & Lime Co. will have capital stock of \$2,000,000 and issue bonds for \$1,000,000; will probable elect following: President, A. W. Page, president of Nazareth Cement Co., Nazareth, Pa.; vice-president, Charles Warner of Charles Warner Company, Wilmington, Del.; secretary-treasurer, Loring A. Cover, president of Maryland Portland Cement Co.

Okla., Ardmore.—Oscar O. Ayres and others interested are arranging for site for Portland cement plant previously noted; contemplated daily capacity, 5000 barrels; reported cost, \$1,000,000; work to commence in spring of 1910.

Tex., Dalhart.—Dalhart Concrete Block Co. organized with \$13,500 capital stock to manufacture concrete blocks; T. R. Day, president; W. M. Chandler, vice-president; H. W. Galbraith, secretary; W. B. Slaughter, treasurer.

Okla., Ardmore.—Oscar O. Ayres and others interested are arranging for site for Portland cement plant previously noted; contemplated daily capacity, 5000 barrels; reported cost, \$1,000,000; work to commence in spring of 1910.

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### COTTON COMPRESSES AND GINS

Ala., Montgomery.—Capitol Gin Co. incorporated with \$11,000 capital stock; P. Rand, president; L. F. Jackson, both of 27 Beaver St., New York.

Ala., Montgomery.—Montgomery Gin Co. incorporated with \$10,000 capital stock; P. Rand, president; L. F. Jackson, secretary-treasurer; both of 27 Beaver St., New York.

Ark., Heber.—Heber Milling Co. will rebuild cotton gin reported burned; loss \$4000.

Ark., Morrilton.—Morrilton Cotton Oil Co. will rebuild cotton gin reported burned; loss \$12,000.

Ga., Adairsville.—Boace Martin and Sam Meeks will establish cotton gin at Iron Hill.

Ga., Arlington.—Coward Company awarded contract to Mr. Manston, Dallas, Tex., to install four cotton gins, doubling capacity of plant.

Ga., Dry Pond, R. F. D. from Jefferson.—Dry Pond Gin Co. incorporated with \$5000 capital stock by J. M. Eberhardt, W. F. Head, C. M. Porter and others.

Ga., Evans.—Evans Improved Cotton Ginning Co. incorporated with \$10,000 capital stock by Peter Rand, L. F. Jackson and E. H. Callaway.

Ga., New Hope, R. F. D. from Dallas.—New Hope Gin & Mill Co. incorporated with \$4500 capital stock by S. S. and A. J. Moore.

Tex., Italy.—Italy Compress Co. incorporated with \$25,000 capital stock by J. K. Cain, W. George and others.

Tex., Rockwall.—Millwood Gin Co. incorporated with \$2500 capital stock by W. M. Wisner, W. C. Bishop and I. J. Austin.

Tex., Rockwall.—Collin County Gin Co. incorporated with \$5000 capital stock by B. F. Jones, I. J. Austin and W. C. Bishop.

Tex., Tioga.—M. M. Wallace will probably rebuild cotton gin recently reported burned.

### COTTONSEED-OIL MILLS

Ark., Camden.—Camden Oil & Fertilizer Co. incorporated with \$25,000 capital stock by S. W. De Wolf, president; E. N. Brown, vice-president, and R. E. Bennett, secretary-treasurer.

Tex., Coleman.—Home Cotton Oil Co. will erect two-story brick cotton-oil mill.

Va., Portsmouth.—Cotton Oil & Refining Corporation increased capital stock from \$150,000 to \$350,000.

### ELECTRIC-LIGHT AND POWER PLANTS

Ark., De Queen.—De Queen Light & Ice Co. incorporated with \$50,000 capital stock; C. W. Dawley, president; P. G. Whaley, vice-president; Paul Coleman, secretary and treasurer.

Ark., Mammoth Spring.—Frank F. Hill, Memphis, Tenn., and associates have begun construction of proposed water-power-electric plant; will build dam 300 feet long with 25-foot head and install 150-kilowatt generator, turbine wheels, etc.; concrete and steel buildings; has awarded machinery contracts; engineer in charge, J. A. Omberg, Memphis, Tenn.

Fla., St. Petersburg.—St. Petersburg Investment Co., H. Walter Fuller, president, will rebuild electric-light plant; will install generators and engines; general offices of company at Philadelphia, Pa.

Ga., Blanton.—Chattahoochee River Power Co. incorporated by R. H. Hardaway, T. A. Jamison, George A. Pearce, Richard W. Needham and others, all of Columbus, Ga.; capital stock \$100,000, with privilege of increase to \$2,000,000; will construct dam 1000 feet long and 30 feet high, involving 40,000 yards of masonry; will install horizontal wheels direct connected to electric generators; develop 8000 horse-power for transmission by electricity; estimated cost of initial dam, power-house and transmission lines, \$400,000; location of plant, on Chattahoochee River between Columbus and West Point; engineer in charge, J. E. Sirrine, Greenville, S. C. Address company at Columbus.

Ga., Elberton.—Broad River Power Co., Isaac G. Swift, vice-president, has no plans for beginning construction of water-power-electric plant; has made surveys, etc., and estimates that 8000 horse-power can be developed. (Previously mentioned.)

Ga., Hawkinsville.—P. H. Lovejoy, Mayor, will receive bids until October 15 for machinery and material for electric-light system lately mentioned. (See "Machinery Wanted.")

Ga., Macon.—Mercer University will install electric-light plant.

La., Hammond.—H. P. Mollere will install 15-kilowatt 110-volt equipment at Walker; has purchased equipment.

Mo., Buffalo.—Big Naungua Power Co. incorporated with \$490,000 capital stock by Irvin Phillips, A. W. Martin, W. C. Clayton and others.

Mo., Chillicothe.—City will vote October 23



on issuance of \$150,000 bonds for electric-light plant and water-works. Lately mentioned. Address The Mayor.

Mo., Malden.—City is having plans prepared by Rollins & Co., Bean Bldg., Kansas City, Mo., for addition to electric-light plant; estimated cost of improvements, \$7000.

N. C., Albemarle.—City reported to have selected J. M. Bandy, Greensboro, N. C., as designing and consulting engineer for proposed water-works, sewerage and lighting; surveys being made. (\$67,000 bond issue previously noted.)

N. C., Reidsville.—City voted issuance of bonds for construction of electric-light plant. Address The Mayor.

Okla., Durant.—City will vote October 19 on issuance of \$50,000 bonds for electric-light plant, settling basin at water-works and for steel bridge. Address The Mayor. (Recent election declared invalid.)

Okla., Dustin.—City will vote October 16 on issuance of bonds for electric-light plant and water-works. Address The Mayor.

Okla., Wewoka.—City has voted issuance of \$60,000 bonds for electric-light plant, water-works and sewer system. Address The Mayor.

Tenn., Jonesboro.—Markwood Power Development Co. incorporated with \$20,000 capital stock by A. T. Markwood, C. E. Burchfield, W. H. Martin and others.

Tenn., Limestone.—John Gillespie, Johnson City, Tenn., has optioned Chucky River falls with a view to constructing water-power-electrical plant.

Tenn., Memphis.—City Council committee, P. J. Moran, chairman, is consulting with Thos. B. Whitted, engineer, Charlotte, N. C., relative to proposed electric-light plant; may issue \$1,000,000 bonds.

Tex., Fort Worth.—City voted October 12 on issuance of \$25,000 bonds for extension of electric-light system. Address The Mayor. (This supersedes previous action.)

## FLOUR, FEED AND MEAL MILLS

Ga., Guyton.—S. H. Morgan and Philip Morgan will establish grist mill and food crusher; will later establish elevator; corn and other cereals will be conveyed to mill by chute over street; Louis W. Morgan, superintendent.

Okla., El Reno.—El Reno Alfalfa Milling Co. incorporated with \$15,000 capital stock by J. T. Bradford, Karl E. Humphrey and W. S. Hanson.

Va., Coburn.—Cinchfield Milling Co. incorporated with \$25,000 capital stock; T. B. Estes, president; N. E. Dickinson, vice-president; D. Culbertson, secretary-treasurer; will establish flour mill.

Va., Coburn.—Cinchfield Milling Co. incorporated with \$25,000; T. B. Estes, president; N. E. Dickinson, vice-president; D. Culbertson, secretary-treasurer.

Va., Covington.—Alleghany Milling Co., E. M. Nettleton, president (recently noted to rebuild burned plant), will probably erect small flour mill; plans for building and machinery not settled; has placed order for feed mill with B. F. Starr Company, 455 North St., Baltimore, Md.

## FOUNDRY AND MACHINE PLANTS

Ala., Anniston.—Machine Shop.—Diden Machine Works organized by E. T. Diden; will establish plant for repairing engines, machinery, etc.

Ala., Gadsden.—Cars.—Gadsden Foundry Co. will, it is reported, increase capacity of plant, installing two 300-ton boilers and operating foundry to make castings for cars to be repaired.

La., Baton Rouge.—Metal Culverts.—Dixie Culvert & Metal Co., Atlanta, Ga., C. C. Fouts, president, will establish plant for manufacturing metal culverts, etc.

Md., Baltimore.—Machine Shop.—Fritz Mergenthaler, 612 Fidelity Bldg., has plans by George Reff, Baltimore, for addition to plant on Hollingsworth street; brick; 20x12 feet; cost \$2500.

Miss., Mount Carmel.—Machinery.—Mount Carmel Machinery Co. incorporated with \$10,000 capital stock by Ross Hall, L. A. Jones, William Polk and others.

Mo., St. Louis.—Ranges, Heaters, etc.—American Malleable Range Co. incorporated with \$6000 capital stock by Jacob Caplan, Alvina Caplan and Hyman Simpkins.

Mo., St. Louis.—Machinery.—Elby Rotary Engine Co. incorporated with \$100,000 capital stock by John H. Tulley, P. R. Fitzgibbon and F. J. Curran.

N. C., Charlotte.—Machinery.—Southern Machinery & Manufacturing Co. incorporated with \$20,000 capital stock by Thomas B. Lee, A. W. Webb and others.

Va., Norfolk.—Foundry.—Berkley Foundry & Structural Co. incorporated with \$25,000 capital stock; A. J. Cuthrell, president. Portsmouth, Va.; Nathan Block, vice-president; W. H. C. Deal, treasurer and general manager; S. H. Hodges, secretary, all of Norfolk; will erect \$5000 foundry.

## GAS AND OIL DEVELOPMENTS

Ky., Berea Grit (not a postoffice).—Torchlight Oil & Gas Co. incorporated with \$200,000 capital stock by A. C. Smith, Louisa, Ky. and others to develop 30,000 acres of oil and gas lands in Berea Grit.

La., Lake Charles.—Big Five Oil Co. incorporated with \$50,000 capital stock; O. S. Plummer, president; F. C. Plummer, vice-president; R. A. McKeenolds, secretary-treasurer; L. F. Benckenstein, general manager.

Okla., Marietta.—Stratford Oil & Gas Co. has increased capital stock from \$25,000 to \$50,000.

Okla., Walters.—Cache Valley Oil & Gas Co. incorporated with \$10,000 capital stock by L. D. Hough, J. H. Bradley, D. U. Esser and others.

Tex., Austin.—Austin Oil Co. incorporated by E. B. Robinson, R. H. Kirby and Helen M. Kirby.

Tex., San Antonio.—Weesatche Oil Co. has increased capital stock from \$12,000 to \$20,000.

W. Va., Lewisburg.—Continental Oil & Gas Co. incorporated with \$100,000 capital stock by D. C. T. Davis, Jr., Lewisburg; Stalge Davis, H. A. Mathews, both of Charleston, W. Va., and others.

W. Va., Parkersburg.—South Bend Oil & Gas Co. incorporated with \$10,000 capital stock by John W. Raybould, Loring Staggs, Harry Betsall and others.

W. Va., Parkersburg.—Columbus Oil & Gas Co. incorporated with \$40,000 capital stock by R. H. Moss, Parkersburg; W. S. Sapp, C. A. Crabtree, both of Columbus, Ohio, and others.

## ICE AND COLD-STORAGE PLANTS

Ark., De Queen.—De Queen Light & Ice Co. incorporated with \$50,000 capital stock by C. F. Dawley (president), P. G. Whalley, W. L. Martin and Paul Coleman.

Ark., De Queen.—De Queen Light & Ice Co. incorporated with \$50,000 capital stock; C. W. Dawley, president; P. G. Whalley, vice-president; Paul Coleman, secretary-treasurer.

Ga., Greensboro.—E. G. Enright, Statesboro, Ga., has decided not to erect ice plant at Greensboro, recently reported contemplated.

Miss., Greenville.—Consumers' Ice & Cold Storage Co. incorporated with \$50,000 capital stock by T. H. Hood, O. H. Harney and others.

Tenn., Etowah.—Hwassee Coal & Supply Co. will establish ice plant with capacity of 75 tons.

Tenn., Knoxville.—East Tennessee Packing Co. will erect addition to plant and increase capacity to 10 tons of ice daily.

Tex., Elgin.—Elgin Ice Factory, F. K. Leggett, proprietor, Livingston, Tex., will establish 10-ton ice plant; will erect iron clad building; B. M. Lewis, engineer in charge; machinery bids now open. (See "Machinery Wanted.")

Va., Norfolk.—Johns Bros. incorporated with \$50,000 capital stock; W. S. Johns, president; Kenney Johns, secretary-treasurer.

## IRON AND STEEL PLANTS

Ala., Ensley.—Open-hearth Furnaces.—Tennessee Coal, Iron & Railroad Co., Birmingham, Ala., is preparing space for construction of two additional 100-ton open-hearth furnaces.

Ala., Gadsden.—Alabama Consolidated Coal & Iron Co., Birmingham, Ala., has relined and blown in furnace No. 1; is preparing to build concentrator plant; New York office at 165 Broadway.

Ala., Thomas.—Iron Furnace.—Republic Iron & Steel Co. has blown in its third furnace; three furnaces at Thomas are now in operation; offices in Frick Building Annex, Pittsburgh, Pa., and at 115 Broadway, New York.

Okla., Sapulpa.—Bar Iron.—Sapulpa Steel & Iron Mills incorporated with capital stock of \$300,000 by Samuel R. Wells and William C. Wells of Sapulpa and James H. Gordon of McAlester, Okla.; will establish plant reported last month; daily output to be 100 tons merchant bar iron.

Va., Pulaski.—Iron Furnace.—Pulaski Iron Co. has blown out furnace for relining and repairs; main office, Real Estate Trust Bldg., Philadelphia, Pa.

## LUMBER-MANUFACTURING PLANTS

Ala., Panola.—Smith & Reed will establish sawmill.

Fla., Jacksonville.—Morgan Lumber Co. organized with Morgan Gress, president, has purchased Hillman-Sullivan property on McGirts Creek and will operate plant; also purchased \$700,000 of timber land along St. John River; will expend \$100,000 for improving equipment of mill; will erect concrete structures to house machinery and construct concrete foundations for heavy machinery to be installed.

Fla., Jacksonville.—Madison Timber Co., recently reported incorporated with \$6000 capital stock, M. V. Gress, president, will establish mill with capacity of 70,000 feet lumber daily; machinery purchased; construction begun.

Fla., Manatee County.—C. H. Tedder, Tampa, Fla., has purchased 20,000 acres of timber land in Manatee county and will establish plant for manufacturing crossties.

Ga., Newnan.—W. S. Askew Company will install drykiln of 8000 to 10,000 daily capacity. (See "Machinery Wanted.")

Ga., Valdosta.—Panabaker Lumber Co. organized by R. L. Panabaker and N. A. Williams.

La., Boyce.—Dunham & Robinson, Eden, La., will erect sawmills to replace plant recently reported burned.

La., Denham Springs.—S. J. Stubbs, Macon, Ga., has sold timber land to Denham Springs capitalists, who will develop the property.

La., Hammond.—Hammond Lumber Co., J. B. Nalty, president, will make improvements to plant; will erect drykilns, camps and lumber sheds and install new machinery in mill proper, more than doubling capacity of plant.

La., New Orleans.—Coast Manufacturing Co. incorporated with \$50,000 capital stock; F. Salmen, president; N. W. Murphy, vice-president; J. B. Carnal, secretary.

Miss., Lake.—G. B. Merrill & Bro., recently noted to rebuild plant reported burned, will erect planing mill and drykiln; will install matcher, molder, rip saw and resaw; daily capacity of plant, 60,000 feet yellow pine.

Miss., Lexington.—McBee Lumber Co. incorporated with \$10,000 capital stock by John A. McBee, J. H. Smith, Dalton McBee and others.

Miss., Tennile.—Tennile Lumber Co., J. P. Pratt, president, will erect building 46x210 feet; machinery purchased; daily capacity, 100,000 feet yellow-pine lumber.

North Carolina.—Paxton Lumber Co., Bristol, Tenn., purchased tract of timber land in Western North Carolina and will establish circular-saw mill with capacity of 25,000 feet daily.

N. C., Roaring River.—Parks Lumber Co. incorporated with \$25,000 capital stock by H. H. Parks and others.

Okla., Westville.—Westville Lumber Mill & Finishing Co. incorporated with \$25,000 capital stock by J. T. Sheffield, Felix Allison, George E. Marrs and others.

S. C., Barnwell.—C. C. Simpson, Westminster, S. C., purchased land cutting approximately 70,000,000 feet timber on Atlantic Coast Line Railroad, between Snelling and Dunbarton, S. C.; will establish mill with 45,000 feet daily capacity; reported purchase price, \$125,000.

S. C., Georgetown.—Fairfield Lumber Co. incorporated with \$300,000 capital stock by M. W. Pyatt, L. M. Overton and H. L. Ellington.

Tenn., Burns.—W. E. Cathey will establish sawmill, heading and handle factory.

Tenn., Unaka Springs.—Unaka Springs Lumber Co. incorporated with \$10,000 capital stock by J. J. Hager, J. W. and H. D. Broce and others.

Tex., Hardin County.—T. J. Williams of Texas Lumber Co., Beaumont, Tex., has purchased 1500 acres of pine timber lands in Hardin county and will probably develop.

Tex., Orange.—Lutcher & Moore Lumber Co. awarded contract to Standard Drykiln Co., Indianapolis, Ind., for three-room brick drykiln; capacity 60,000 feet of lumber daily.

Tex., Todd.—Holladay-Shilkeo Lumber Co. incorporated with \$40,000 capital stock by William H. Holladay, E. G. Shilkeo and John G. Tod.

Va., Newport News.—Poarch Timber Co. incorporated with Percy Poarch, president; M. H. Poarch, vice-president; S. H. Tucker, secretary-treasurer.

W. Va., Glendon.—Birch Boom & Lumber Co. incorporated with \$25,000 capital stock by Thomas F. Walsh, Grafton, W. Va.; J. C. Remage, Sutton, W. Va.; S. Wineman, Panettsburg, Pa., and others.

W. Va., Huntington.—Omega Lumber Co. incorporated with \$10,000 capital stock by J. R. Le Sage, Azel McCurdy, F. A. Johnson and others.

## MINING

Ala., Montgomery.—Iron Ore.—C. A. Pickett and associates interested in development of iron-ore deposits in Chilton county near Montgomery.

Ga., Cartersville.—Iron Ore, etc.—La Follette Coal, Iron & Railway Co., La Follette, Tenn., has leased ore mines of Etowah Development Co., consisting of 575, Morgan, Wheeler and Iron Hill mines and equipment; will increase equipment and working capacity of 575, Morgan and Wheeler mines and install entire new equipment in Iron Hill mine.

Ky., Bowling Green—Stone.—Bowling Green Cut Stone Co. leased 40 acres adjoining plant and will increase capacity.

Ky., Bowling Green—Stone.—J. Condra has leased body of stone on Barren River and will establish quarry.

La., New Orleans.—Myles Mineral Co. incorporated with \$500,000 capital stock; F. F. Myles, president; B. B. Myles, vice-president; H. M. Journe, secretary-treasurer.

Md., Oakland—Sand.—E. F. Hartley, Fairmont, W. Va., and others have purchased at \$65,000 local sand plant.

Mo., Neosho—Lead and Zinc.—Golden Rule Mining & Milling Co. incorporated with \$3000 capital stock by R. C. Geck, J. E. Shepperd, F. E. Taten and others.

N. C., Lenoir—Gold.—Nieblung Gold Mining Co. incorporated with \$100,000 capital stock by Sidney H. Bourne, Lenoir, and Henry E. Wood, 43 Exchange Pl., New York.

Okla., Ardmore—Lead and Zinc.—Arbuckle Lead & Zinc Mining Co. incorporated with \$100,000 capital stock by Franklin M. Smith, Joplin, Mo.; J. D. Ward, C. C. Todd, both of Muskogee, Okla., and others.

Okla., Bartlesville—Zinc.—Bartlesville Zinc Co. purchased five acres of land adjoining present plant and will construct two new blocks.

Okla., Durant—Glass Sand.—W. H. Cook, Box 217, recently noted to develop glass-sand deposits, will establish glass factory. (See "Miscellaneous Manufacturing Plants.")

Tenn., Knoxville.—Guanaco Mining Co. incorporated with \$60,000 capital stock by C. S. McManus, W. D. Williams, Jr., M. C. Monday and others.

## MISCELLANEOUS CONSTRUCTION WORK

Fla., Fort McTea (not a postoffice).—Seawall.—Bids will be received at U. S. Engineer Office, Montgomery, Ala., until October 20 for construction of seawall at Fort McTea; information on application; H. B. Ferguson, Captain, Engineers. (See "Machinery Wanted.")

Fla., St. Joseph—Docks.—Apalachicola Northern Railroad Co., R. B. Colman, general manager, Apalachicola, contemplates construction of docks at St. Joseph Bay.

La., Jeanerette—Drainage.—Grand Marais Subdrainage District, recently noted to construct drainage system to drain 5000 acres, has not yet appointed engineer; bids will be asked; district to be under control of Iberia and St. Mary Drainage District Commission, L. A. Grevenberg, secretary.

Md., Baltimore.—Wharves.—Baltimore, Chesapeake & Atlantic Railway, A. C. Shand, chief engineer, Philadelphia, reported as having purchased Piers 4 and 4½ Light street for \$70,000 and to erect wharves.

Miss., Natchez—Drainage.—John F. Jenkins, Chancery Clerk of Adams county, is inviting bids for clearing right of way for proposed Homochitto drainage canal in connection with reclamation of 40,000 acres of swamp lands; canal will be 4.31 miles long.

Tex., San Juan—Gravity Irrigation.—Gravity Irrigation Co. incorporated with \$5000 capital stock by John Clooner, John J. Conway, A. W. Roth and others.

Va., Norfolk—Docks.—W. B. Emert and H. B. Hubbell of Potomac & Chesapeake Steamboat Co. awarded contract to J. H. Pierce, Norfolk, for improvements to terminals.

## MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Saverton Company incorporated with \$3000 capital stock; J. F. Cannon, president; J. S. Harris, secretary, treasurer, and B. G. Berry.

Ala., Birmingham.—Butter and Cheese.—American Butter & Cheese Co. incorporated with \$5000 capital stock by D. C. Bowman, Birmingham; Karl G. Sakewitz, Detroit,

Mich.; Elmer L. McMillan, Louisville, Ky., and others.

Ala., Birmingham—Land Improvement.—Oakland Development Co. incorporated with \$10,000 capital stock; G. F. Lindsay, president; George A. Williams, secretary-treasurer.

Ala., Montgomery—Farm Implements, Vehicles, etc.—Deere Implement & Vehicle Co., C. W. Mauser, president, recently reported incorporated with \$30,000 capital stock, will retain stock to be transferred on orders of John Deere Plow Co. of St. Louis, Mo., which is parent of new company.

Ga., Atlanta—Publishing.—Southern Banker Publishing Co. incorporated with \$25,000 capital stock by Richard H. Brown and Haynes McFadden.

Ga., Atlanta—Land Improvement.—West End Park Incorporated with \$12,000 capital stock by George A. Campbell, Paul Wesley, W. S. Ausley and William J. Davis.

Ga., Atlanta—Printing.—Index Printing Co., E. G. Willingham, president, will erect \$25,000 fireproof building on site recently noted purchased; four stories; 42x92 feet; plans by Butt & Morris, Atlanta; cost of machinery, \$25,000; will do book and job printing; machinery proposals to be opened December 1. (See "Machinery Wanted.")

Ga., Atlanta—Automobiles.—Jackson-Cerf Motor Co., 12 Whitehall St., organized by Renfro Jackson and Ed Cerf; to establish garage.

Ga., Macon—Motor Cars.—Burns Motor Car Co. organized with \$10,000 capital stock by H. K. Burns, T. G. Parker, both of Macon, and J. A. Smith, Houston county, Georgia.

Ga., Marietta—Auto Service, etc.—Auto Service Co., recently reported incorporated, will operate hack and dray lines; later may equip garage and repair shop; J. R. Brumby, Jr., president; E. R. Nichols, secretary-treasurer. (See "Machinery Wanted.")

Ga., Savannah—Land Improvement.—Prudential Investment & Development Co. incorporated with \$5000 capital stock by George A. Mercer, J. M. Lang, O. S. Abrams and George W. Hunt.

Ky., Fulton—Garage.—I. H. Read and C. E. Webb contemplate erection of two-story garage.

Ky., Louisville—Automobiles.—United Auto Co. incorporated with \$5000 capital stock by James Norton, J. A. Dugan and others.

Ky., Louisville—Motor Cars.—Marshall-Clark Motor Car Co. incorporated with \$30,000 capital stock by R. H. Edelen, F. S. Clark and T. L. Marshall.

La., New Orleans—Oyster Cultivation, etc. National Fish & Oyster Co. incorporated with \$60,000 capital stock by M. Cogenhem, Albert Cogenhem and M. L. Simmons.

La., New Orleans—Electrical Appliances, Tools, etc.—S. J. Stewart Company, Ltd., incorporated with \$150,000 capital stock by Seymour J. Stewart, W. A. Dinkle, M. D. Theard and others.

La., New Orleans—Land Improvement.—Second District Realty Co. incorporated with \$15,000 capital stock by Mark A. Morse, Wm. H. Douglas and J. W. Barkdull.

Md., Pikesville—Wells & Wells, 114 East Lexington St., Baltimore, Md., planning to develop Waldron Park, consisting of 20 acres, Reisterstown road, near Pikesville; will lay out avenues, subdivide into building lots and make other improvements.

Miss., Brookhaven—Groceries.—J. M. Wood Grocery Co. incorporated with \$10,000 capital stock by C. M. Smith, W. L. Smith and P. M. Buie.

Miss., Greenwood—Publishing.—Chronicle Publishing Co. incorporated with \$10,000 capital stock by E. R. McShane, W. H. Gilbert and others.

Mo., Centalla—Land Improvement.—Centalla Development Co. incorporated with \$10,000 capital stock by J. J. Austene, C. E. Adams, W. C. Baker and others.

Mo., Joplin—Land Improvement.—B. W. Realty Co. incorporated with \$50,000 capital stock by Frank S. Hamilton, J. W. Perry and Maud Board.

Mo., Kansas City—Land Improvement.—Missouri Leasing & Development Co. incorporated with \$5000 capital stock by Henry Palne, H. C. Palne and John Greig.

Mo., Kansas City—Land Development.—Suburban Realty Co. organized by A. D. Bird-sall and A. S. Coyle; purchased 80 acres of land and will develop as residential district.

Mo., St. Joseph—Feed and Fuel.—North St. Joseph Feed & Fuel Co. incorporated by H. H. Montgomery, George Montgomery and J. E. Heffner.

N. C., Burlington—Mercantile.—Cooper Dry Goods Co. incorporated with \$30,000 capital

stock by N. H. and W. H. Cooper, Burlington, and L. P. Elliott, Bowdens, N. C.

N. C., Rocky Mount—Tobacco.—People's Co-operative Tobacco Co. incorporated with \$100,000 capital stock by R. H. Hicks, W. E. Jeffreys and C. E. Cooper.

N. C., Sanford—Land Improvement.—Eureka Land Co. incorporated with \$50,000 capital stock by R. E. Carrington, S. P. Hatch and D. E. McIver.

N. C., Sanford—Wilkins-Lashley Company incorporated with \$100,000 capital stock by L. P. Wilkins, J. C. Lashley and J. R. Jones.

Okla., Hobart—Garage.—Citizens' Auto Co. (W. L. Baker and H. Carner) will erect garage recently mentioned; corrugated iron siding; rubberoid roof; concrete floor; ordinary construction; cost \$1600; will install machinery. (See "Machinery Wanted.")

Okla., Oklahoma City—Mercantile.—Durham-Stone Company incorporated with \$10,000 capital stock by W. J. Durham, R. A. Durham and J. B. Stone.

Okla., Pawhuska—Publishing.—Capital Publishing Co. incorporated with \$12,000 capital stock by W. P. Grouse, F. W. Webster and E. E. Sams.

S. C., Georgetown—Land Improvement.—Georgetown Development Co. incorporated with \$30,000 capital stock.

S. C., Greenville—Printing.—Daily Piedmont Printing House incorporated with \$4500 capital stock by J. R. McGhee, G. W. Griffin and William Leiby.

Tenn., Knoxville—Exposition.—Appalachian Exposition Co. incorporated with \$10,000 capital stock by W. J. Oliver, D. C. Chapman, R. S. Hazen and others; has leased Chilhowee Park and will hold exposition each year; will erect several buildings; one to be erected at once 150x400 feet.

Tenn., Nashville—Contracting.—Dixie Contracting Co. incorporated with \$20,000 capital stock by W. H. Whorley, B. F. Fields, D. D. Blake, Jr., and others.

Tex., Corpus Christi—Publishing.—Herald Publishing Co. incorporated with \$7800 capital stock by Jeff N. Miller, W. G. Blake and J. W. Faivella.

Tex., Dallas—Live Stock and Land.—Esperanza Live Stock & Land Co. incorporated with \$250,000 capital stock by C. J. Sorrells, P. L. Freeman and N. J. Nagle.

Tex., Dallas—Automobiles.—Dycus Automobile Co. incorporated with \$3000 capital stock by Norman D. Dycus, Harry T. Leslie and Oliver Nichols.

Tex., Dallas—Printing.—Exline-Williams Company incorporated with \$10,000 capital stock by Marcus P. Exline, A. S. Exline and W. I. Caney.

Tex., Dallas—Automobiles.—Dycus Auto Co. incorporated with \$3000 capital stock by Norman D. Dycus, Harry T. Leslie and Oliver Nichols.

Tex., Gause—Mercantile.—Gause Trading Co. incorporated with \$10,000 capital stock by Charles H. Coffield, J. F. Coffield, Jr., and Dan V. Moore.

Tex., Hidalgo County—Pecans, etc.—Pecan-Alfalfa Production Co. will incorporate with \$30,000 capital stock; probable officers, E. C. Ballew, president; Garnett O. Fields, secretary-treasurer; Edgar B. Marchant, manager, all of Clinton, Okla.; will grow pecans and alfalfa in Hidalgo county. Mr. Marchant recently noted to purchase 1000 acres land near Monte Cristo (not a postoffice). (See "Machinery Wanted.")

Tex., Houston—Interlocking Plant.—Houston Belt & Terminal Railway, J. J. Flynn, general manager, Houston, and other railroads will construct interlocking plant at crossing of Houston Belt & Terminal, International & Great Northern and San Antonio and Aransas Pass railroads; three functions; operated by electricity; cost \$12,000.

Tex., Houston—Publishing.—Southwestern Farmer Publishing Co. incorporated with \$50,000 capital stock by Albert Watkins, Jr., W. E. Richards and M. E. Foster.

Tex., Houston—Rice Farms, etc.—Sapp Rice Co., recently organized, is preparing to incorporate; members are E. E. Sapp, general manager, Stillson, Tex., with R. S. Stirling, Dr. T. W. Shearer, Edward D. Smith and F. B. West, all of Houston, Tex.; will develop between 5000 and 10,000 acres rice lands near Stillson, where drainage district has been formed; roads will be built; water for irrigation supply from Trinity River; Schlafl & Porter, engineers, 206 Stewart Bldg., Houston, Tex.

Tex., Houston—Orchard.—Gulf Coast Orchards Co. organized with \$300,000 capital stock to establish orchards for nuts, figs, oranges, etc., on 1000 acres of land recently acquired through F. E. Pyle Realty Co.

Tex., Luling—Transfer.—Bell Transfer Co.

incorporated with \$5000 capital stock by Gus Bell, C. F. Bell and D. Addington.

Tex., San Antonio—Land Development.—T. N. Givens purchased and will develop 40 acres of land known as Brooklyn Heights; will grade streets, clear land and make other improvements.

Tex., San Antonio—Steam Laundry.—Texas Steam Laundry, Thomas H. Gray, president, will erect laundry building; three stories and basement; frontage 87 feet; cost \$30,000.

Tex., San Saba—Land Improvement.—San Saba Valley Realty Co. incorporated with \$20,000 capital stock by R. G. Coryell, T. A. Murray and R. W. Burleson.

Tex., Saragosa—Mercantile.—Saragosa Mercantile Co. incorporated with \$10,000 capital stock by H. Robbins, J. E. Dart and P. K. Holmes.

Tex., Springtown—Land Improvement.—Springtown Land Co. incorporated with \$10,000 capital stock by J. T. Roberson, C. Malone and J. F. Malone.

Tex., Waco—Laundry.—New Method Laundry incorporated with \$6000 capital stock by N. M. Gay, A. A. Woolbright, Sid Stone and others.

Tex., Woodward—Land Development.—D. J. Woodward and others planning to develop Woodward Wells; plan includes erection of \$25,000 hotel, road improvements, etc.

Va., Alta Vista—Furniture.—Alta Vista Furniture Co. incorporated with \$10,000 capital stock; H. B. Shawen, president; Mrs. J. L. Beall, vice-president; T. V. Elson, secretary.

Va., Harrisonburg—Land Improvement.—Harrisonburg Realty Corporation incorporated with \$40,000 capital stock; B. W. Carpenter, president; W. J. Dingleline, vice-president; W. N. Sprinkel, secretary-treasurer.

Va., Norfolk—Land Development.—Willoughby Development Co. incorporated with \$10,000 capital stock; J. H. Cofer, president; J. R. Jenkins, vice-president; W. W. Robertson, secretary-treasurer.

Va., Norfolk—Land Improvement.—Lorraine Development Co. incorporated with \$10,000 capital stock; W. E. Hickman, president; T. J. Pope, vice-president; H. C. Denlinger, secretary-treasurer.

Va., Norfolk—Marine Railway.—Old Dominion Railway Corporation organized with \$50,000 capital stock; A. Warren, president and treasurer; John H. Privott, vice-president; I. S. Warren, secretary; will establish marine railway plant; will erect machine, boiler and machine shops; capacity 1500 tons; cost \$35,000. (Recently mentioned.)

Va., Norfolk—Hardware.—Ball & Co. incorporated with \$10,000 capital stock; Eph. Ball, president; L. M. Foster, vice-president; C. L. Young, secretary-treasurer.

Va., Norfolk—Land Improvement.—Bush Bluff Co. incorporated with \$100,000 capital stock; J. R. Council, president; C. R. Hudgins, treasurer; H. W. Davis, secretary.

Va., Richmond—Construction.—Javi Perkins Construction Co. incorporated with \$20,000 capital stock; F. Perkins, president; A. H. Perkins, vice-president; C. I. Perkins, secretary.

W. Va., Keystone—Land Improvement.—Augusta Land Co. incorporated with \$5000 capital stock by J. E. Parsons, M. L. Davis, Ralf Harris and others.

## MISCELLANEOUS MANUFACTURING PLANTS

Ala., Birmingham—General Manufacturing.—King Manufacturing Co. organized with \$35,000 capital stock; Erie Pettus, president; C. W. King, general manager; S. F. King, secretary-treasurer.

Ala., Birmingham—Automobiles.—Company organized with E. F. Ensen, Jr., president; Ike Adler, vice-president; J. D. Keiser, secretary-treasurer; to establish plant for manufacturing automobiles; equipment purchased.

Ark., Camden—Fertilizer.—Camden Oil & Fertilizer Co. incorporated with \$25,000 capital stock by S. W. De Wolf, president; E. N. Brown, vice-president; R. E. Bennett, secretary-treasurer.

Fla., Tampa—Boats.—Dachel & Sears, Benton Harbor, Mich., contemplate, it is reported, establishment of boat-building plant.

Ga., Atlanta—Reed Products.—Bombay-reed Manufacturing & Importing Co. organized with \$15,000 capital stock; Edward F. Mayberry, president and treasurer; Edwin K. Ward, vice-president and manager; will manufacture baskets, reed and rattan furniture, etc.; no machinery needed.

Ga., East Point—Heel Springs.—Heel Spring

Co. (Eddleman & McConnell) will establish recently-reported plant to manufacture heel springs; will erect two-story building 20x40 feet, of ordinary construction; cost \$1000; machinery purchased; daily capacity 300 heel springs.

Ga., Valdosta—Cigars.—Byrd Belote, Madison, Fla., contemplates organization of company to establish cigar factory.

La., Hammond—Creamery.—N. O. Nelson, St. Louis, Mo., is interested in company organized to establish creamery.

La., New Orleans—Chemicals.—Ozoline Chemical Co. incorporated with \$10,000 capital stock by Leon Williams, William D. Grace and Peter Weisler.

La., New Orleans—Office Supplies.—Office Supply Co. incorporated with \$50,000 capital stock; J. C. Ford, president; C. H. Jones, vice-president and treasurer; George S. Mandeville, general manager; L. E. Jones, secretary.

Md., Baltimore—Glass.—Buck Glass Co. has purchased from William H. Grafflin, 204 Vickers Bldg., former plant of Nivison Glass Co., at Fort avenue, Lawrence street and Baltimore & Ohio Railroad, and will manufacture glass bottles, etc.

Miss., Jackson—Candy.—Jackson Candy Factory incorporated with \$5000 capital stock by D. W. Ruffin, W. S. Hosford and E. W. McAdams.

Mo., Kansas City—Liquid Carbonic.—Liquid Carbonic Co. purchased site 50x120 feet and will erect factory building.

Mo., Marionville—Gas.—Eastern capitalists, represented by W. A. Bixby, Springfield, Mo., has 20-year franchise to establish gas plant. (See Missouri.)

Mo., Pierce City—Eastern capitalists, represented by W. A. Bixby, Springfield, Mo., have 20-year franchise to establish gas plant. (See "Missouri.")

Mo., St. Louis—Shoes.—Desnoyer Shoe Co., William Desnoyer, president, Springfield, Ill., has acquired six-story structure and will equip for manufacturing shoes.

Mo., St. Louis—Photographic Supplies.—Auto-Foto Company incorporated with \$75,000 capital stock by Charles C. Spinks, Alfred R. Chouinard and Abe Manheiser.

Mo., St. Louis—Automobile Accessories.—Carter Carburetor Co. incorporated with \$12,500 capital stock by Alden H. Little, Charles O. Baxter and Henry T. Ferriss.

N. C., Asheville—Couplings, Shafts, etc.—Ball-Bearing Coupler Co. incorporated with \$25,000 capital stock by W. E. Johnson, W. A. Buchanan, T. J. Cooper and others.

N. C., Gastonia—Medicine.—Challenge Remedy Co. incorporated with \$120,000 capital stock by Henri Piquet, James R. Broom and Joseph T. Abernathy.

N. C., Mooresboro—Creamery.—Elgin Co-operative System organized with \$6500 capital stock by C. O. Champion, John H. McBrayer, J. D. Putnam and others; will establish creamery with capacity of one and one-half tons of milk hourly.

N. C., Shelby—Clothesline.—Hardin Patent Clothesline Co. organized with Charles H. Hardin president, S. A. Parker vice-president, John R. McClure, secretary-treasurer; will manufacture patent clothesline; daily capacity 300. (See "Machinery Wanted.")

Okla., Durant—Bottling.—Durant Manufacturing & Bottling Co. incorporated with \$10,000 capital stock; E. B. Hinshaw, president; George E. Bonline, vice-president and general manager; I. S. Hinshaw, secretary-treasurer; will enlarge and continue plant for manufacture of soft drinks, ice cream, etc.

Okla., Durant—Glass.—W. H. Cook, Box 317, recently noted (under "Mining") to develop sand deposits, will establish glass factory; company not yet organized; plans indefinite. (See "Machinery Wanted.")

Okla., Oklahoma City—Safes.—Conger Safe Co., 133 West 1st St., recently noted incorporated (under Guthrie) with \$150,000 capital stock and to consolidate with F. L. Conger Safe Co.) will establish plant with daily capacity of 20 safes; F. L. Conger, president and general manager; W. P. Conger, secretary-treasurer; will erect brick and steel buildings 100x140 and 75x140 feet in size at cost of \$29,000; cost of machinery \$10,000; will open bids on machinery about November 1; Bailey & Bailey, architects and engineers. (See "Machinery Wanted.")

S. C., Walhalla—Acetylene Gas.—Hercules Manufacturing Co., 703 Chestnut St., Chattanooga, Tenn., will not establish plant at Walhalla. (Recently incorrectly reported.)

Tenn., Alton Park—Paint.—Lookout Paint Manufacturing Co. organized with \$100,000 capital stock; J. L. Johns, president and general counsel; S. M. Watkins, vice-president; J. R. Rathmell, secretary; C. B. Sam-



uel, treasurer and manager; to take over American Tri-Metallic Paint Co.; will install new machinery for manufacturing mixed paint. (Recently mentioned.)

Tenn., Bristol—Chewing-gum.—Bristol Drug Manufacturing Co. will install machinery for manufacturing chewing-gum.

Tenn., Chattanooga.—James T. McDermott, Chicago, Ill., contemplates, it is reported, establishment of manufacturing plant.

Tenn., Knoxville.—Clothing.—Suttle & Beeler leased adjoining building and will double capacity of plant; will construct archway over alley to connect two buildings on second floor.

Tenn., Knoxville.—Clothing.—American Clothing Co. organized with \$100,000 capital stock by F. M. Gettys (president), E. M. Keunedy, J. M. Armstrong; will establish clothing factory in Mynatt Building; is reorganization of American Clothing Co., Louisville, Ky.

Tenn., Memphis.—Soap.—Larkin Company will improve plant and erect two-and-a-half-story addition; cost of improvements, \$3000.

Tenn., Memphis.—Beverages.—Pepsi-Cola Company, main office, Newbern, N. C., will establish plant; output about 1,000,000 gallons per season.

Tenn., Memphis.—Wheels, etc.—B. & G. Perfected Spring Wheel Co. incorporated with \$10,000 capital stock by T. M. Galbreath, W. B. Galbreath, Walter Goodman and others.

Tenn., Ridgedale.—Gas.—Chattanooga Gas Co., Chattanooga, Tenn., will extend service to Ridgedale; will lay about two miles of new mains.

Tex., Amarillo.—Stone.—Amarillo Stone Manufacturing Co. incorporated with \$20,000 capital stock by H. A. Nobles, H. R. Morrow and J. M. Clayton.

Tex., Dalhart.—Creamery.—Dalhart Creamery Co. organized with \$10,000 capital stock; will incorporate; has contracted for building and plant with Hastings Industrial Co., Chicago, Ill.; building to be 25x40x12 feet, with sheds; concrete cement, with galvanized-iron roof; Homer Rowe, J. A. Hill and C. E. Williams, members of building committee.

Tex., Dallas.—Mattresses, etc.—Tom B. Burnett Co. (Tom B. Burnett) will erect and equip factory recently mentioned; will erect \$80,000 fireproof structure; 58x150 feet; six stories and basement; steel, concrete and brick; metal window frames; wire glass; roller doors; plans by C. D. Hill & Co., Dallas; will install felting machines and other machinery for manufacture of mattresses and bedding; wants competitive bids. (See "Machinery Wanted.")

Tex., El Paso.—Telegraphones, etc.—National Telegraphone & Supply Co. incorporated with \$5000 capital stock by W. B. Girdon, H. W. Cutshal and George E. Milligan.

Tex., Fairbairns.—Creamery.—Jersey Cattle Co. organized by Ed C. Lasater and Miller Bros. to establish creamery and dairy.

Tex., Fort Worth.—Harness.—Nobby Harness Co. incorporated with \$12,000 capital stock by W. H. Digges, J. A. Clary, J. M. Clary and others.

Tex., Henderson.—Creamery.—F. W. Bridges, R. M. Richardson, W. E. Shadden and others are interested in organization of company with \$3000 capital stock to establish creamery.

Tex., Mexia.—Medicine.—Central Texas Medicine Co. incorporated by T. M. Means, A. T. Schulz and Jesse McLendon.

Tex., Palestine.—Creamery.—Mr. Lacy, Hallettsville, Tex., contemplates establishment of creamery.

Tex., Paris.—Mattresses.—Paris Mattress Manufacturing Co. incorporated with \$10,000 capital stock by D. C. Rollins, A. N. Rodgers and H. F. Tinnin.

Tex., Paris.—Mattresses.—Paris Mattress Manufacturing Co. incorporated with \$10,000 capital stock by A. N. Rodgers, H. F. Tinnin, F. R. Fenet and others.

Tex., San Antonio.—Farm Implements.—J. E. Houghland, Eldon, Iowa, proposes establishment of \$100,000 plant for manufacturing patented pulverizer and planter.

Tex., Sherman.—Gas.—Sherman Gaslight & Fuel Co., 138 North Travis St., had plans prepared by A. J. Anderson, Sherman, for erection of plant to replace present structure; 30 feet 8 inches by 40 feet 8 inches; concrete; fireproof construction; will install water-gas apparatus; cost \$7000; cost of building, \$3500; machinery and building contracts awarded; daily capacity, 250,000 cubic feet of water gas; engineer in charge, W. J. McCorkindale, Ishpeming, Mich. (Recently noted.)

Tex., Texarkana.—Medicine.—Hutchinson Medicine Co., 1222 State St., recently noted to establish plant to manufacture medicine,

awarded contract for building to J. D. Johnson, 896 Dudley Ave., Texarkana, Ark.; structure 60x90 feet; brick; cost \$3800; J. C. Hutchinson, Jr., secretary; J. N. White, vice-president.

Tex., Tyler.—Creamery.—Tyler Creamery Co. incorporated with \$4300 capital stock by S. H. Cox, Gus F. Taylor and J. H. Herndon.

Tex., Tyler.—Creamery.—Tyler Creamery Co. incorporated with \$4300 capital stock by S. H. Cox, H. B. Marsh and J. H. Herndon.

Va., Alexandria.—Patent.—Separator Recovery Co. incorporated with \$300,000 capital stock; S. M. Shoemaker, president, Eccleston, Md.; L. N. Hopkins, secretary-treasurer, 110 East Preston St., Baltimore, Md.; will develop patent.

Va., Bristol.—Distilling.—Bristol Distilling Co. will double capacity of plant; present capacity, 200 gallons corn whisky daily.

Va., Richmond.—Extracts, etc.—C. F. Sauer Company contemplates erection of additional structures to double capacity of plant.

Va., South Boston.—Creamery.—South Boston Creamery Co. incorporated with \$25,000 capital stock; W. H. Shepherd, president and treasurer; A. H. Vaughan, secretary-manager.

W. Va., Grafton.—Glass.—Leopold Mambourg, Mount Vernon, Ohio, has leased window-glass factory; will improve and operate.

W. Va., Martinsburg.—Lime and Stone Products.—Maryland Portland Cement Co., 829 Equitable Bldg., Baltimore, Md., proposes change of title to Security Cement & Lime Co. and acquiring Berkeley Limestone Co. of Martinsburg; will manufacture all kinds of lime and stone products, including hydrated lime; daily output of lump lime, 2000 barrels. (For other details see Md., Security, under "Concrete and Cement Plants.")

W. Va., Wheeling.—Games.—Polar Specialty Co. incorporated with \$5000 capital stock by R. H. Carter, Elm Grove, W. Va.; L. C. Runke, J. H. Rumard, both of Wheeling, and others; to manufacture games.

### RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Okla., Hobart.—Chicago, Rock Island & Pacific Railway, A. Shields, maintenance department, will construct coal chutes, roundhouse, water tanks and concrete sidewalks at Hobart.

Tex., Marshall.—Marshall & East Texas Railway, R. J. Lockwood, chief engineer, Marshall, will erect buildings recently reported; small machine, blacksmith and wood-working shops; will install machinery.

### ROAD AND STREET IMPROVEMENTS

Ala., Birmingham.—City is lowest bidder at \$10,430 for paving certain streets; John McCartin, Street Commissioner. (Lately mentioned.)

Ala., Ensley.—A. L. Arnold, City Clerk, will receive bids until October 19 for artificial stone sidewalks, combined curb and gutter and grading various streets. (See "Machinery Wanted.")

Ala., Gadsden.—City will probably award contract to Graves-Matthews Paving Co., Birmingham, Ala., to pave streets in business section, including Broad, Chestnut, 4th, 5th and Court streets; contract calls for 22,000 square yards vitrified-brick paving; cost, \$1.71 per yard. (Recently mentioned.)

Ala., Montgomery.—City awarded contract to Southern Paving & Construction Co., Montgomery, for asphalt paving on Lawrence street; will receive bids until October 18 for improving Jefferson Davis avenue and for various sidewalk improvements. Address The Mayor.

Ala., Montgomery.—Robert Tait, City Treasurer, will receive bids until October 18 for paving roadway of Columbus street with brick or granite. (See "Machinery Wanted.")

Ala., Montgomery.—Robert Tait, City Treasurer, will receive bids until October 18 for paving of various streets, together with all granite curbing, etc. (See "Machinery Wanted.")

Ala., Montgomery.—Robert Tait, City Treasurer, will receive bids until October 18 for paving roadway of Park place with clay gravel. (See "Machinery Wanted.")

Ala., New Decatur.—City awarded contract at \$15,776.60 to Good Roads Construction Co., Memphis, Tenn., for gravel and tar paving. (Lately mentioned.)

Ark., Heber.—City contemplates construction of two miles concrete sidewalks. Address The Mayor.

Ark., Little Rock.—Superintendent of Public Works E. A. Kingsley has estimated \$30,

402 to be the cost of paving 14th street with macadam and constructing curbs and gutters.

D. C., Washington.—Commissioners District of Columbia will receive bids until October 15 for gutters, macadamized pavement, curb, etc., on 13th street N. W. (See "Machinery Wanted.")

Fla., Jacksonville.—City awarded contract to Fred Ogram of Jacksonville to lay 3000 linear feet of tile sidewalk on Union and Main streets and Florida avenue; contract price, 77 cents per square yard for tiles.

Fla., Jacksonville.—City introduced ordinance providing for construction of sidewalks to cost \$100,000. Address The Mayor.

Fla., Miami.—Dade county will vote November 23 on \$150,000 bonds for road improvements; E. S. Frederick, County Engineer. (Recently noted as planning certain road improvements.)

Fla., Sarasota.—City awarded contract to I. M. Brandon, Sarasota, for improving four miles of street. (City lately noted as receiving bids.)

Fla., Tavares.—Lake county will probably construct five miles of clay and sand road during next 12 months; approximate cost per mile, \$600 for clay and \$250 for stone; H. H. Duncan, County Commissioner.

Ga., Columbus.—City will pave 13th street from First to Sixth avenue. Address The Mayor.

Ga., Douglas.—Coffee county will probably construct 50 miles of clay and sand roads during next 12 months; Dan Latt, chairman Board of County Commissioners.

Ga., Newnan.—Coweta county will probably construct 20 miles of sand and clay roads during next 12 months; approximate cost \$25,000; H. C. Glover, County Commissioner.

La., Louisville.—Jefferson county will probably rebuild and improve sand and clay roads during next 12 months; approximate amount to be expended \$25,000; James F. Brown, County Commissioner.

La., Oglethorpe.—Macon county will probably construct 50 miles of dirt, sand and clay roads during next 12 months; J. R. Lane, County Engineer.

La., Alexandria.—Board of Aldermen adopted ordinance for paving of sidewalks and construction of curbing on Bolton avenue; J. P. Tarregano, Mayor.

La., Estherwood.—Police Jury of Acadia parish will build soil road from Estherwood to Mammon oil field; construction by parish.

La., Houma.—City awarded contract to H. V. O'Rourke, Houma, for construction of sidewalks recently mentioned.

Miss., Poplarville.—Pearl River county will probably construct roads during next 12 months; approximate cost \$32,000; H. L. Smith, clerk.

Mo., Union.—Franklin county will probably construct several miles of macadamized roads during next 12 months; Chas. L. Moore, County Engineer.

N. C., Charlotte.—Mecklenburg county will probably construct 15 miles of stone roads during next 12 months; approximate cost, \$3500; S. T. Stowe, County Engineer.

N. C., Reidsville.—City voted issuance of bonds for laying additional granolithic sidewalks. Address The Mayor.

Okla., Oklahoma City.—City will award contract about October 25 for paving various streets with sheet asphalt; estimated cost, \$250,000. Address The Mayor.

Okla., Perry.—City will receive bids on proposed paving until October 19; plans and specifications at office of City Clerk F. F. Busch; about 44,000 square yards brick paving on four-inch concrete foundation; about 12,000 linear feet curb and gutter, together with storm sewer; F. W. Bobbitt, City Engineer. (See "Machinery Wanted.")

S. C., Beaufort.—Beaufort county will probably construct 1000 miles of oyster-shell, clay and sand roads during next 12 months; C. A. Verdler, County Commissioner.

Tenn., Bristol.—Sullivan county rejected bids for construction of \$200,000 road improvements, lately mentioned. Address Sullivan County Commissioners.

Tenn., Carthage.—Smith county will vote February 26 on issuance of \$100,000 bonds for road and street improvements. Address Smith County Commissioners.

Tex., Anahuac.—Chambers county voted \$65,000 road bonds. Address County Commissioners.

Tex., Anson.—Jones county voted issuance of \$15,000 bonds for road and street improvements. Address Jones County Commissioners.

Tex., Beaumont.—George W. Bancroft, F. H. Farwell and others propose organizing company to construct road in Orange county

to Mansfield Ferry and in Jefferson county to connect with shell road.

Tex., Carrizo Springs.—Dimmit county will probably construct 60 miles of clay roads during next 12 months; approximate cost, including bridges, \$500 per mile; J. Ray Brown, engineer.

Tex., Carrizo Springs.—J. A. Clift of Carrizo Springs has contract to grade road from Carrizo Springs to Asherton, distance of nine miles.

Tex., Dallas.—J. B. Winslett, City Secretary, will receive bids until October 20 for construction of improvements on Poydras street from south line of Commerce street to north line of Young street; bitulithic pavement on concrete foundation; rock asphalt on concrete base, concrete curb and gutters. (See "Machinery Wanted.")

Tex., Dallas.—City will invite bids for paving Cedar Springs avenue and Highland street. Address The Mayor.

Tex., Fort Worth.—City voted October 12 on issuance of \$135,000 bonds for street improvements. Address The Mayor. (This supersedes previous action.)

Tex., Houston.—City awarded contract to T. A. Lucas of Houston to pave five blocks on Walker avenue; cost, \$6000 in addition to cost of bricks, which will be furnished by city. T. C. Tarver, City Engineer.

Tex., Texarkana.—Bowie County Commissioners awarded contract at \$175,000 to Maxey & Co., Houston, Tex., for construction of 42 miles of graded and graveled roads. (Lately mentioned.)

Va., Norfolk.—Board of Control submitted to Public Improvement Committee of Council report stating cost of curbing and guttering Landing street to be \$5085; W. T. Brooke, City Engineer.

Va., Norfolk.—Board of Control awarded contract to Barber Asphalt Co., Philadelphia, Pa., for improvements to Westover and Graydon avenues; contract calls for 14,000 square yards of Trinidad asphalt at \$1.93 per square yard, and \$2.50 per square yard for repair work.

Va., Staunton.—Augusta county will probably construct 10 miles of stone and macadamized roads during next 12 months; approximate cost, \$4000 per mile; A. H. Pettigrew, Churchville, Va., County Engineer.

W. Va., Charles Town.—Jefferson county will probably construct 12 miles of limestone roads during next 12 months; James H. Hendricks, County Engineer.

W. Va., Wheeling.—Ohio County Commissioners opened bids October 14 for macadamizing National road as follows: Seventh mile, 250 yards; ninth mile, 100 yards; tenth mile, 100 yards; eleventh mile, 75 yards; twelfth mile, 75 yards; H. L. Bell, County Engineer, City Bank Bldg. (See "Machinery Wanted.")

W. Va., Williamson.—Mingo county will probably construct 40 miles of roads during next 12 months; approximate cost, \$15,000; James Hatfield, Wharcliff, W. Va., County Engineer.

### SEWER CONSTRUCTION

Ala., Montgomery.—Robert Tait, City Treasurer, will receive bids until October 18 for construction of 900 feet of 3½-foot concrete storm sewer on Maury street. (See "Machinery Wanted.")

Ark., Eldorado.—Board of Commissioners of Sewer District No. 1 awarded contract to Mellor, Lucovitz & Shull of Eldorado to construct sewer system, comprising five miles of mains and four septic tanks; \$30,000 bond issue sold.

Fla., Lakeland.—City will vote on November 11 on issuance of \$65,000 bonds for extension of sewer system and water-works and erection of schools; John S. Edwards, Mayor.

Fla., Pensacola.—City contemplates erection of pumping station at sewer plant; T. Chalkey Hatton, consulting engineer, Wilmington, Del.

Md., Baltimore.—Sewerage Commission, 904 American Bldg., is having specifications prepared for lateral sewers, and will call for bids in November; approximate cost \$50,000; plans are being made and specifications will soon be invited for sanitary interceptor which will parallel Jones' falls from high level interceptor to North and Maryland avenues.

N. C., Albemarle.—City reported to have selected J. M. Brady, Greensboro, N. C., as designing and consulting engineer for proposed installation of sewerage and water systems and lighting; surveys being made; (\$87,000 bond issue previously mentioned.)

N. C., Reidsville.—City voted issuance of bonds for construction of sewer system. Address The Mayor. (Recently mentioned.)

Okla., Oklahoma City.—City will receive

bids until October 18 for construction of lateral sewer in blocks 5, 24, 32, 52; Bob Parman, City Clerk. (See "Machinery Wanted.")

Okl., Wewoka.—City has voted issuance of \$90,000 bonds for sewer system, electric-light plant and water-works. Address The Mayor.

Okl., Oklahoma City.—Bob Parman, City Clerk, will receive bids until October 25 for construction of sanitary main sewer. (See "Machinery Wanted.")

Okl., Sapulpa.—City will vote October 16 on issuance of \$50,000 sewer-extension bonds. Address The Mayor.

S. C., Columbia.—Bids opened October 11 for construction of 390 feet of eight-inch sewer on Gregg street; F. C. Wyse, City Engineer. (See "Machinery Wanted.")

Tex., Fort Worth.—City voted October 12 on issuance of \$150,000 bonds for extension of sewer system. Address The Mayor. (This supersedes previous action.)

Tex., Corpus Christi.—City has voted issuance of \$142,000 bonds for construction of sewer system. Address The Mayor.

Va., Richmond.—City opened bids October 11 for construction of certain sewers; diameter of sewers from 2 to 4½ feet; about 4377 linear feet; to be brick or reinforced concrete; Charles E. Bolling, City Engineer. (See "Machinery Wanted.")

W. Va., Keyser.—City will vote October 19 on issuance of \$16,500 bonds for extension of sewer system and construction of dam at water-works. Address The Mayor.

### TELEPHONE SYSTEMS

Ark., Smithville.—Smithville Rural Telephone Co., Martin V. Garner, president (recently reported incorporated with \$5000 capital stock, has not fully decided plans; will build 14 miles telephone line this fall, connecting Smithville and Imboden; John R. Barnett, secretary, Smithville.

Ga., Cordele.—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., will expend \$15,000 for improvements to system, including taking down all wires in city except long-distance lines leading from other cities and putting them in cables; S. F. Wakefield in charge of local system.

Ga., Gainesville.—Gainesville & County Home Telephone Co. organized with C. C. Maness president, S. W. Westbrook vice-president and H. W. Crankshaw secretary-treasurer.

La., Ferriday.—Cumberland Telephone & Telegraph Co., main office Nashville, Tenn., preparing to extend long-distance lines from Ferriday to Arkansas State line; H. H. Johnson, superintendent of construction.

Mo., Windsor.—Missouri Union Telephone Co. will issue \$25,000 of bonds for extension and improvements to plant, etc.

Tenn., Ripley.—Lightfoot Telephone Co. incorporated by J. H. Caughlan, W. H. Foust, W. F. Robertson and others.

Tenn., Pulaski.—Farmers & Merchants' Telephone & Telegraph Co. will be name of company recently noted organized to establish telephone system; A. L. King, temporary president, and Geo. P. Meadows, secretary-treasurer (also temporary). (See "Machinery Wanted.")

W. Va., Keyser.—Mineral County Mutual Telephone Co. organized with C. W. Slevier, president; W. W. Kenser, vice-president; O. A. Hood, secretary; J. W. Wagoner, treasurer.

### TEXTILE MILLS

Ga., Canton.—Blue Denims.—Canton Cotton Mills will, it is reported, build addition and install 10,000 spindles, 300 looms, electric generator, etc.; present equipment, 9200 ring spindles and 336 broad looms.

Ga., Chattahoochee.—Cotton Yarns, etc.—Whittier Mills Co. will add 5000 spindles and accompanying machinery; present equipment, 10,000 ring spindles, 100 braidors, etc.

Ga., Covington.—D. A. Thompson, C. G. Smith, J. L. Callaway and others will form cotton-mill company with capital stock of \$100,000.

Ga., Fort Valley.—Cotton Yarns.—Fort Valley Yarn and Hosiery Mill will increase equipment of machinery; now has 1400 ring spindles, etc.

N. C., Concord.—Cotton Yarns.—Magnolia Mills Co. will build 50x70-foot addition and install additional machinery; now has 1800 ring spindles, etc., operated by electricity.

N. C., Jamestown.—Twine.—Oakdale Cotton Mills will erect addition and install twine machinery; building to be 103x200 feet; two stories; brick; present equipment, 5344 spindles. (Recently mentioned.)

N. C., Wilson.—Cotton Yarns.—Wilson Cot-

ton Mills will, it is reported, install additional machinery to change from coarse to fine yarn production; present equipment, 6234 ring spindles, etc.

S. C., Edgefield.—Cotton Cloth.—Beaver Dam Mills about completed 80x80-foot addition and arrangements for 5000 spindles additional, previously reported; building cost about \$4000 and machinery about \$40,000; engineer in charge, J. E. Sirrine, Greenville, S. C.

Tenn., Loudon.—Hosiery.—Loudon Hosiery Mills awarded contract for erection of addition previously reported; will add one story and build double story 80 feet long to present structure; will install knitting machinery; now has 108 knitting machines, etc.; architects for additions, Bauman Bros., Knoxville, Tenn.

Tenn., Nashville.—Sheetings.—Warlo Cotton Mills will add machinery to increase to about 25,000 spindles and 675 looms; now operating 20,000 ring spindles and 540 broad looms; purchased all equipment.

Tenn., Winchester.—Hosiery.—Davis Hosiery Mills, E. Chattanooga, Tenn., will build plant; two-story building, 40x130 feet, with 24x40-foot ell, of brick, with composition roof, concrete foundations and footings, plumbing, electric lights and electric freight elevator; cost \$8000; architects, Huntington & Sears, James Bldg., Chattanooga.

Tex., Gonzales.—Sheetings, etc.—Gonzales Cotton Mill Co. incorporated to continue plant of same title; contemplates adding 2000 spindles, 50 looms and hydro-electric equipment; now has 5000 ring spindles and 150 narrow looms; T. F. Harwood, president; capital stock \$100,000.

### WATER-WORKS

Ala., Tuscaloosa.—City will vote October 25 on issuance of \$25,000 water-works bonds, lately mentioned. Address The Mayor.

La., Amite City.—City will vote on issuance of \$25,000 bonds for water-works system. Address The Mayor.

Fla., Lakeland.—City will vote November 11 on issuance of \$65,000 bonds for enlarging and extending water-works and sewer system and erecting schools; John S. Edwards, Mayor.

Ky., Madisonville.—City contemplates voting on bonds for water-works system. Address The Mayor.

La., Fort St. Philip.—Contract for water-works at Fort St. Philip not awarded to General Contracting & Construction Co., Atlanta, Ga. (Recently incorrectly noted.)

Miss., Ackerman.—City has engaged X. A. Kramer, Magnolia, Miss., to prepare plans for construction of water-works; reservoir to have capacity 15,000 gallons; bids to be opened November 2. (Bond issue recently noted.)

Miss., Benoit.—M. M. Thompson, Mayor, will receive bids until November 2 for drilling artesian well. (See "Machinery, etc., Wanted.")

Mo., Chillicothe.—City will vote October 23 on issuance of \$150,000 bonds for water-works and electric-light plant. Address The Mayor.

N. C., Albemarle.—City reported to have selected J. M. Bandy, Greensboro, N. C., as designing and consulting engineer for installation of proposed water and sewer systems and lighting; surveys being made; \$67,000 bond issue previously noted.)

N. C., Mooresville.—City awarded contract to Tucker & Laxton, Charlotte, N. C., at \$8718.30 for construction of water-works at Mooresville; reinforced concrete reservoir of 100,000 gallons daily capacity; centrifugal pumps and motors; Adlai Osborne, Newton, N. C., consulting engineer; W. D. Templeton, City Clerk. (Recently noted.)

N. C., Reidsville.—City voted issuance of bonds for extension of water mains. Address The Mayor.

Okl., Durant.—City will vote October 19 on issuance of \$50,000 bonds for settling basin at water-works system, steel bridge and electric-light plant. Address The Mayor. (Recent election declared invalid.)

Okl., Dustin.—City will vote October 18 on issuance of bonds for water-works and electric-light plant. Address The Mayor.

Okl., Fort Gilson.—Earl Hill, Town Clerk, received bids October 12 for installation of water-works system lately mentioned. (See "Machinery Wanted.")

Okl., Grandfield.—City has voted issuance of \$28,000 water-works bonds. Address The Mayor.

Okl., Sapulpa.—City will vote October 16 on issuance of \$250,000 bonds for installation of water-works system. Address The Mayor.

Okl., Wewoka.—City has voted issuance of \$60,000 bonds for water-works, sewer sys-

tem and electric-light plant. Address The Mayor.

Okl., Woodward.—City voted issuance of bonds for extension of water-works. Address The Mayor.

Tex., Athens.—City voted \$30,000 bond issue for construction of water-works. Address The Mayor.

Tex., Anson.—Jones county voted issuance of bonds for construction of water-works, lately mentioned. Address Jones County Commissioners.

Tex., Ennis.—City has voted issuance of \$12,000 bonds for completion of water-works system, lately mentioned. Address The Mayor.

Tex., Fort Worth.—City will vote October 12 on issuance of \$275,000 bonds for extension of water-works. Address The Mayor. (This supersedes previous action.)

Tex., Port Arthur.—Port Arthur Water Co. will extend fire mains distance of 13 blocks and place six additional fireplugs.

Tex., Sulphur Springs.—City is inviting bids and will probably award contract in about 10 days for drilling artesian well; probable depth 3500 feet; F. D. Keaster, Mayor. (See "Machinery Wanted.")

Va., Martinsville.—City voted issuance of \$35,000 bonds for water-works improvements. Address The Mayor.

W. Va., Keyser.—City will vote October 19 on issuance of \$16,500 bonds for constructing dam at water-works and for extension of sewer system. Address The Mayor.

### WOODWORKING PLANTS

Fla., Tallahassee.—Spokes and Rims.—D. M. Lutz will establish plant for manufacturing spokes, rims and handles. (Recently mentioned.)

Ark., Leslie.—Barrels, etc.—Williams Cooperative Co. will rebuild No. 1 mill, reported burned; loss \$15,000.

Ga., Columbus.—School Desks.—Dixie School Desk Co. incorporated with \$25,000 capital stock by R. P. Spencer, O. V. Lamar, George M. Clapp and others; reported to take over plant of Columbus School Desk Co.

La., Alexandria.—Wood Pipe.—A. Wyckoff & Son Company, Elmira, N. Y., will build wood-pipe factory; details not determined.

La., New Orleans.—Barrels.—Chickashaw Cooperage Co., Gretna, La., C. G. Evans, manager, will erect cooperage plant; two stories; wood; sheeted and covered with corrugated iron; site 150x195 feet.

Md., Baltimore.—Wagons, Trucks, etc.—Charles A. Sefton will repair plant recently reported burned; contract not let; loss \$6000.

Miss., Columbus.—Bowls.—Southern Wooden Bowl Co. has purchased machinery and will erect plant at cost of several thousand dollars.

Miss., Georgetown.—Spokes, Boxes, etc.—Georgetown Manufacturing Co., W. J. Pavis, president, will establish plant to manufacture spokes, shingles and boxes; cost of machinery (mainly purchased), \$30,000; capacity, two cars daily; R. T. Ross, manager.

Miss., Itta Bena.—Bowls and Columns.—Fetterman Bowl & Column Co. incorporated with \$25,000 capital stock to manufacture wooden bowls and colonial columns.

Miss., Meridian.—Wagons, etc.—Queen City Wagon & Manufacturing Co. incorporated with \$10,000 capital stock by W. G. Jackson, Forest, Miss., and B. F. Padgett, Meridian.

N. C., High Point.—Piano and Organ Stools.—Southern Novelty Works incorporated with \$25,000 capital stock by A. S. Caldwell, Jr., Arthur Ellison and J. F. Ellison; will manufacture organ and piano stools and novelties.

N. C., Wilson.—Spring Wagons.—Hackney Wagon Co., W. D. Hackney, president, has plans by John B. Deans, Wilson, for spring-wagon department recently noted; one story; fireproof; 40,000 square feet floor space; capacity, 100 spring wagons weekly; machinery purchased; W. D. Hackney, engineer in charge.

Tenn., Burns.—Handles and Heading.—W. E. Cathey will establish handle and heading factory and sawmill.

Tenn., Sequatchie.—Handles.—Sequatchie Handle Works will rebuild boiler-room, machinery department, singletree shop and dry-house reported burned.

Tex., Houston.—Furniture.—E. A. Hudson Furniture Co. incorporated with \$80,000 capital stock by E. A. Hudson, E. O. Garrett, Elmer Wolf and J. L. Garrett.

Va., Alta Vista.—Furniture.—Alta Vista Furniture Co. incorporated with \$10,000 capital stock; H. B. Shawen, president; Mrs. J. L. Beall, vice-president; T. V. Elsom, secretary.

Va., Lynchburg.—Carriages.—Henley Carriage Co. incorporated with \$10,000 capital stock; W. B. Henley, president and general manager; E. A. Watson, vice-president; C. H. Thompson, secretary-treasurer.

Va., Norfolk.—Standard Box & Lumber Co. will, it is reported, rebuild plant recently reported burned; loss \$80,000.

### BURNED

Ala., Eufaula.—Greene County Cotton Co.'s warehouse; loss \$40,000.

Ala., Florence.—Store of Consumers' Supply Co. and factory of Ashcraft Cotton Mills, owned by Ashcraft Cotton Mills.

Ala., Tinsela.—Hybert & Co.'s gin; loss \$2500.

Ala., Valhermosa Springs.—Emmet Thomas' cotton gin; loss \$5000.

Ark., Danville.—John Buchanan's cotton gin.

Ark., Fowler.—Cotton gin owned by Oil Mill Co., Dardanelle, Ark.; loss several thousand dollars.

Ark., Heber.—Heber Milling Co.'s cotton gin; loss \$4000.

Ark., Leslie.—Williams Cooperative Co.'s No. 1 mill; loss \$15,000.

Ark., Morrilton.—Morrilton Cotton Oil Co.'s cotton gin; loss \$12,000.

Ark., Prescott.—Tom Barham's cotton gin; loss \$3000.

Ark., Rover.—W. R. Hogan's cotton gin and grist mill; loss \$2000.

Ark., Sherrill.—Sidney Well's cotton gin.

Ark., Texarkana.—Gulf Cooperage Co.'s stave and heading factory; loss \$10,000.

Fla., East Lake.—East Lake Hotel; Chas. W. Levy's dwelling; loss \$4000.

Fla., Graceville.—G. D. Nealy's cotton gin; loss \$2500.

Ga., Athens.—Shoal Creek Ginney Co.'s cotton gin; loss \$6000.

Ga., Chamblee.—Munday Bros.' sawmills; loss \$4000.

Ga., Claxton.—DeLoach Hotel Co.'s hotel; loss \$6500.

Ga., Lilly.—J. E. McGough's cotton gin; loss \$1500.

Ga., Valdosta.—Tobe Seckinger's cotton gin.

Ga., West Point.—T. C. Pearson's cotton gin.

Ky., Burnside.—Cloyd & Co.'s store, loss \$7000; Oakford Nunn's grocery store, loss \$5000; E. E. Kelsay's building, loss \$7000; John McDaniel's store, loss \$5000; M. E. Pruitt's furniture and undertaking establishment, loss \$10,000; George P. Cooper's store, loss \$6000; Golden Building, loss \$8000.

Ky., Henderson.—Henderson Chair Co.'s plant; loss \$12,000.

Ky., Kenesee.—Main Jellico Mountain Coal Co.'s commissary.

Ky., Kenesee.—Jellico Mountain Coal Co.'s commissary; loss \$20,000.

La., Mount Pleasant.—J. A. Hyce's gin and warehouse.

La., Saint Gabriel.—Mrs. J. M. Carville's cotton gin at Carville.

La., Winnfield.—W. O. Williams' store building, owned by Mrs. F. N. Holmes; loss \$2500.

Miss., Starkville.—C. C. & W. J. Seltz's sawmill.

Miss., Woodruff.—Forest City Land & Lumber Co.'s sawmill; loss \$60,000.

Mo., Mexico.—J. L. Andrews' residence; loss \$10,000.

Mo., New Home (not a postoffice).—New Home Coal Co.'s plant; Atlas Coal Mining & Mercantile Co., Rich Hill, Mo., lessee; loss \$30,000.

Mo., Springfield.—Wunderlich Cooperage Co.'s plant, loss \$40,000; Eisenmayer Milling Co.'s plant, loss \$60,000.

N. C., McFarlan.—J. D. Rhine's cotton gin; loss \$1000.

N. C., Newton.—Newton Hosiery Mills; loss \$15,000.

N. C., Raleigh.—W. J. Ellington's sawmill; loss \$1000.

N. C., Shopton, R. F. D. from Charlotte.—S. W. Crowell's cotton gin; loss \$500.

N. C., Washington.—Moore Lumber Co.'s stave plant; loss \$10,000.

N. C., Rocky Point.—Harry W. Hearne's sawmill plant and tool shop at Swan's Point; loss \$1000.

Okl., McAlester.—George M. Chaney's furniture and undertaking establishment; loss \$30,000.

Okl., McAlester.—State Hotel; Smith & Brown's building; Pittsburg County Democrat's plant; loss \$23,000.



Okin., Mounds.—Planters' cotton gin, owned by R. Miller, Perry, Tex., and others; loss \$20,000.

Okin., Mounds.—H. Drennan's grain elevator.

S. C., Florence.—Ed H. Childers' saw and planing mills and woodworking plant; loss \$9,000.

S. C., Leno.—Manning K. Long's sawmill; loss \$10,000.

S. C., Sumter.—P. M. Pitts' ginhouse, sawmill, grist and cane mills; loss \$5,000.

S. C., Sumter.—Peter Pitts' cotton gin and sawmill; loss \$17,000.

Tenn., Sequatchie.—Sequatchie Handle Works boiler-room, machinery department, singletree shop and dryhouse.

Tex., Bonham.—John W. Russell's residence; loss \$15,000.

Tex., Buffalo.—W. F. Taylor's cotton gin.

Tex., Burlington.—Rosebud Oil & Cotton Co.'s cotton gin; loss \$16,000.

Tex., Cameron.—Round-bale gin, owned by Hubbell & Slack, Houston, Tex.; loss \$10,000.

Tex., Dallas.—J. C. Blair's residence; loss \$5,000.

Tex., Dallas.—Jos Rothstein's store building; loss \$35,000.

Tex., Gainesville.—Gainesville Iron Works plant; Gainesville Ice Co.'s plant; total loss, \$100,000.

Tex., Gainesville.—Gainesville Iron Works plant; Gainesville Ice Co.'s plant; loss \$100,000.

Tex., Goliad.—West Texas Industrial Academy.

Tex., Houston.—S. Samuels & Co.'s cotton pickery, loss \$10,000; Gaar-Scott Company's building, loss \$17,500, both buildings owned by Houston, East & West Texas Railway, J. C. McVea, acting resident engineer, Houston.

Tex., Mart.—Marlin Oil Co.'s cotton gin; loss \$6,000.

Tex., Mount Calm.—Steve Calloway's cotton gin; loss \$8,000.

Tex., Plano.—Hughston Grain Co.'s corn sheller; loss \$4,000.

Tex., Prosper.—Prosper Gin Co.'s plant.

Tex., Rugby.—John Wright's cotton gin; loss \$7,000.

Tex., Sweetwater.—Silver Cliff Milling & Elevator Co.'s buildings and warehouse; loss \$12,000.

Tex., Sweetwater.—W. K. Shipman's mill and elevator; loss \$10,000.

Tex., Uvalde.—G. E. Booth's livery stable, loss \$5,000; Mrs. S. P. Pulliam's store and dwelling, loss \$6,000.

Tex., Warren.—Tyler Lumber Co.'s planing mill.

Va., Richmond.—Home Brewing Co.'s plant; loss \$4,000.

Va., Roanoke.—Florence Crittenden Home; loss \$20,000.

W. Va., Parkersburg.—Imperial Confectionery Co.'s store; People's Credit Clothing Co.'s store; loss \$30,000; buildings owned by Opera House Investment Co.

W. Va., Wheeling.—Louis Weisgerber's bakery; Mountain State Electrical Co.'s plant; John Dumas' stable; loss \$10,000.

## DAMAGED BY STORM

Fla., Key West.—City damaged by tropical hurricane, total loss estimated at \$2,000,000; enterprises reported damaged include cigar factories of Havana American Company, Geo. W. Nichols & Co., both with main offices in New York; Ruy Ca Lopez, Manuel Lopez, Pielas Torris, Cortez Cigar Co., main office Savannah, Ga.; Wolf Cigar Co., also city fire department's engine-houses Nos. 1 and 3; postoffice; running gears of Government coal stations; First National Bank building.

## BUILDING NOTES

### APARTMENT-HOUSES

Ga., Atlanta.—William Owens will erect two apartment-houses; three stories; pressed brick; tile roof; stone trimmings; six apartments of six rooms each; cost \$50,000.

Md., Baltimore.—Albert Bondy, 1333 Madison Ave., has plans by Otto G. Simonson, 1219 American Bldg., Baltimore, for erection of apartment-house; building will be H shaped; corridors crossing in center of building will contain stairways and elevators; six stories; 40 housekeeping suites of six rooms each; estimated cost, \$100,000.

Mo., Kansas City.—C. T. Murray has had plans prepared by S. R. Frink, Ridge Bldg., Kansas City, for apartment-house; four stories; frontage 138 feet; first story of Carth-

age stone; three upper stories of brick; 18 apartments; apartments to be finished in hardwood; cost \$50,000 to \$60,000.

Mo., St. Louis.—Sanford Investment Co., A. B. Ridington, president, will erect apartment-house at 4333 Maryland avenue; plans prepared.

Mo., St. Louis.—R. J. Schueler will erect \$6,000 apartment-house.

### BANK AND OFFICE BUILDINGS

Ala., Decatur.—Tennessee Valley Bank, S. S. Broadus, president, will erect \$6,000 bank building.

Ark., Alma.—Commercial Bank has awarded contract to W. H. Mitchell, Van Buren, Ark., for erection of \$5,000 bank building. (Lately mentioned.)

Ark., Heber.—Cleburne County Bank awarded contract to B. R. Brown, Heber, at \$7,500 for erection of bank building previously mentioned; two-story structure; 50x80 feet; hot-air heat; construction commenced.

Ark., Little Rock.—People's Health & Accident Insurance Co., Ben Cox, president, will erect office building; 50x140 feet; eight stories; estimated cost \$75,000; plans prepared.

Fla., Fort Myers.—W. E. Heitman will erect brick building to be occupied by Fort Myers Bank.

Ga., Cornelia.—First National Bank, C. J. Hood, president, has plans and will invite bids for erection of bank building.

Ky., Greenville.—Farmers' State Bank, L. W. Irvin, president, will erect \$4,000 bank building; brick; 24x70 feet; hot-water heat; architect, C. W. Kimberlin, 9 Odd Fellows' Bldg., Owensboro, Ky.

Ky., Middlesboro.—H. E. Motch and F. Moomau will erect office building.

Md., Baltimore.—W. D. Gill & Son, 1317 Philpot St., has awarded contract to Morrow Bros., 218 West Saratoga St., Baltimore, for addition to office at 1319 Philpot street; two stories; 16x160 feet.

Miss., Jackson.—Jackson Loan & Trust Co., H. S. Crisler, secretary, awarded contract to J. T. Randle, Jackson, for erection of proposed 100,000 office building; two stories and basement, with walls capable of carrying two additional stories; brick with stone and marble front; plans by J. C. Randle.

N. C., Maxton.—Bank of Robeson at Maxton (S. A. Johnson, Durham, N. C., and others) reported to contemplate erection of building.

Okl., Tulsa.—I. F. Crow, Apache, Okla., and others will, it is reported, erect office building at Tulsa; six stories.

Tenn., Memphis.—Suburban Bank (W. E. Graves) will erect bank building.

Tex., Austin.—E. M. Scarborough, Austin and 396 Broadway, New York, awarded contract to James Black Masonry & Contracting Co., St. Louis, Mo., for erection of bank and office building lately mentioned; 50x160 feet; 10 stories; fireproof; brick and marble; cost \$225,000; plans by Sanguinet & Staats, Fort Worth, Tex.

Tex., Sinton.—J. W. Reynolds, contractors, Sinton, is proceeding with erection of \$450,000 Bank of Commerce building previously mentioned; plans by W. R. McLemore, Corpus Christi, Tex.

### CHURCHES

Ark., Helena.—Baptist Church will erect addition to cost \$10,000; correspondence with architects desired; Gerald Utley, 422½ Cherry St., may be addressed.

Ark., Monticello.—First Presbyterian Church is proceeding with plans for construction of edifice previously mentioned; Dr. Jonathan Purcell, pastor.

Ark., Russellville.—Methodist congregation will erect addition to church. Address The Pastor, Methodist Church.

Fla., Tampa.—Southern Baptist Mission Board, Atlanta, Ga., awarded contract for erection of chapel to J. F. Stubbs, Tampa; size 35x40 feet; frame; plastered; cost \$35,000; plans by Shaw & Jay, Tampa. (Recently noted.)

Fla., Tampa.—Tampa Heights Presbyterian Church has plans by Fred J. James, West Tampa, Fla., for erection of proposed church; 28x110 feet; brick and stone; galvanized-shingle roof; gas and electricity; cost \$25,000.

Ga., Millen.—Baptist Church, Rev. W. E. Wilkens, pastor, will erect edifice to cost \$15,000.

Ga., Waycross.—Central Baptist Church, W. H. Scruggs, pastor, will probably adopt plans by next spring for edifice previously mentioned.

Ky., Franklin.—Baptist congregation awarded contract to D. B. Dearing, Bowling

Green, Ky., for erection of 40x60-foot addition to edifice mentioned in August; ordinary construction; hot-air heat; electric lighting; cost \$15,000; plans by C. K. Colley, Nashville, Tenn.

Md., Baltimore.—Orthodox Greek Church, Constantine Douropoulos, pastor, has purchased church building at Homewood avenue and Chase street and will remodel.

Md., Brunswick.—Reformed Church, E. C. Shafer, chairman building committee, has awarded contract to Werner Bros. for excavating foundation of church; 42x57 feet; concrete and brick; granite trimmings; two towers; estimated cost, \$8,000; construction begun.

N. C., Burlington.—Methodist Church, E. M. Snipes, pastor, has not yet decided on date of opening bids for erection of edifice previously mentioned; pressed-brick structure with granite trimmings; 60x60 feet; hot-air heat; cost \$20,000; plans by Wheeler, Gallagher & Sterne, Charlotte, N. C.

Okl., Oklahoma City.—First Christian Church, R. H. O. Smith, pastor, awarded contract to R. M. Powell, 300 West 5th St., Oklahoma City, for erection of edifice previously mentioned; ordinary construction; auditorium 60x44 feet; electric lighting; cost \$15,000 furnished.

Okl., Oklahoma City.—First Presbyterian Church, Phil Baird, pastor, will erect \$100,000 edifice.

S. C., Cumberland.—Cumberland M. E. Church, S. A. Donahoe, pastor, will erect edifice recently noted; probably brick and stone structure, about 58x55 feet; cost \$15,000; plans not yet definite.

S. C., Gaffney.—Cherokee Avenue Baptist Church, G. A. Hemrick, pastor, has plans by O. D. Wheeler, Charlotte, N. C., for erection of edifice; estimated cost, \$18,000.

S. C., Spartanburg.—Southside Baptist Church, R. E. Neighbour, pastor, recently noted to erect edifice, plans for \$20,000 building with large auditorium; brick veneer; probably steam heat; electric and gas lighting; architect not announced.

S. C., Spartanburg.—Southside Baptist congregation, R. E. Neighbour, pastor, recently noted to erect \$15,000 edifice, has just completed small structure previously mentioned; contemplates erection of larger auditorium next spring.

Tenn., Nashville.—First Presbyterian Church, U. S. A., will award contract soon for erection of church lately mentioned; estimated cost, \$15,000; plans by Robert Sharpe, Nashville.

Tex., Abilene.—M. E. Church South, S. J. Rucker, pastor, awarded contract at \$17,000 for brick and wood work on edifice lately mentioned to McBride & Lindsey, Abilene; size 102x60 feet, with 20x50-foot alcove; hot-air or steam heat; electric lighting; cost \$40,000. (See "Machinery Wanted.")

Tex., Lancaster.—Congregation, S. L. Randle, chairman building committee, has postponed erection of brick-veneer edifice for which plans were recently noted to be prepared by Flanders & Flanders, Dallas, Tex.

Tex., Pecos.—First Baptist Church will open bids about November 1 for erection of edifice recently mentioned; brick and stone structure; about 100x100 feet; hot-air heat; electric lighting; cost \$20,000; plans by W. H. Herbert, Waco, Tex.; Rev. J. B. Cole, chairman building committee.

Va., Richmond.—Allen Avenue Christian Church, Henry Pearce Atkins, pastor, contemplates expenditure of \$32,000 on complete edifice previously mentioned; cost of Sunday-school chapel (contract some months since awarded to C. A. Houston, Richmond), \$17,000; chapel, 80x104 feet; brick and terra-cotta; ordinary construction; low-pressure steam heat; electric lighting; plans by D. Wiley Anderson, Richmond.

W. Va., Elm Grove.—First Christian Church, Wheeling, W. Va., contemplates erection of church at Elm Grove. Address The Pastor, First Christian Church.

W. Va., South Warwood, P. O. Wheeling.—First Christian Church, Wheeling, W. Va., will erect church at South Warwood. Address The Pastor, First Christian Church.

### COURTHOUSES

Ark., Prescott.—Nevada County Levying Court voted \$40,000 appropriation for erection of courthouse. Address Nevada County Commissioners.

Fla., Palatka.—Putnam county opened bids October 13 for erection of courthouse previously mentioned; appropriation, \$36,900. Address L. C. Stephens, chairman, Palatka.

Tenn., Dyersburg.—Dyer County will erect \$60,000 courthouse. Address Dyer County Commissioners.

Texas, Anson.—Jones county voted issuance of \$100,000 bonds for erection of courthouse lately mentioned. Address Jones County Commissioners.

Tex., Hereford.—Deaf Smith County Commissioners have voted issuance of \$125,000 bonds for erection of courthouse lately mentioned. Address County Commissioners.

### DWELLINGS

Ark., Carlisle.—E. M. Proctor awarded contract to J. E. Beeder, Carlisle, for erection of residence; two stories; 12 rooms; brick.

D. C., Georgetown, Station A, Washington. T. J. Morgan has plans by Julius Wenig, 1223 F St. N. W., Washington, for row of dwellings from 1905 to 1915 34th street, Georgetown; two stories; Burgess & Parsons, 627 F St. N. W., Washington, contractors.

D. C., Washington.—Federal Realty Co., 1413 H St. N. W., has plans by Cloughton West, 1808 Kalorama Rd. N. W., Washington, for dwelling at Manor Park; two stories and attic; eight rooms and bath; red brick; slate roof; 24x30 feet.

D. C., Washington.—T. J. Jenkins awarded contract to John Wahl, Washington, for erection of residence at 3010 Q street; two stories; 20x50 feet; red brick; brownstone trimmings; plans by J. Wenig, 1223 F St. N. W., Washington.

D. C., Washington.—John Biddle, 21 5th St. N. W., will erect residence on S street between Connecticut avenue and Phelps place; brick and stone; tile roof.

D. C., Washington.—Edwin C. Dutton, Columbian Bldg., awarded contract to Brashers Bros., Washington, for erection of dwelling at 3712 Morrison street N. W.; two stories; frame; cost \$4,800; plans by Charles Keene, Washington.

D. C., Washington.—H. R. Howenstein, 1314 F St. N. W., has plans by F. T. Schneider, 56 Metzerott Bldg., Washington, for six dwellings from 700 to 710 K St. N. E.; two stories; brick; cost \$15,000.

D. C., Washington.—Merrill Galliber, 208 Maryland Ave. N. E., awarded contract to Charles A. Peters, 626 14th St. N. E., Washington, for erection of dwelling on Deland street N. W.; two stories; frame; cost \$3,000; plans by A. H. Beers, 1333 G St. N. W., Washington.

D. C., Washington.—C. E. Wine will expend \$19,500 in erection of six two-story dwellings recently mentioned; 25x35 feet; eight rooms and bath; hot-water heat; plans by W. C. Allard, 707 G St. N. W.; contractor, C. Swab, Takoma Park.

D. C., Washington.—William L. Manse purchased through James F. Barbour, 622 8th St. N. W., site 74x85 feet at 1st street and Rhode Island avenue N. W., and will erect three dwellings.

D. C., Washington.—J. B. Bowling, 719 13th St. N. W., has plans by A. H. Beers, 1333 G St. N. W., Washington, for six dwellings from 142 to 152 Bryant street N. W.; two stories; brick; cost \$18,000; owner builder.

D. C., Washington.—John C. Newman, 3602 13th St. N. W., awarded contract to E. J. De Lacy, Washington, for dwelling at 1347 Park road; three stories; brick; cost \$6,000; plans by A. B. Mullett & Co., Union Trust Bldg., Washington.

D. C., Washington.—James T. Kenyon, 729 15th St. N. W., Washington, has not received contract, but was lowest bidder for erection of residence for Mrs. Mary S. Thompson. (Recently incorrectly noted.)

Fla., Crainlyn.—Ocean Beach Hotel Co., Dr. J. N. Fogarty, president, will erect small cottages. (See "Hotels.")

Fla., Fort Myers.—Charles A. Stadler, New York, will erect \$8,000 residence.

Fla., Fort Myers.—W. L. Vealey, Moline, Ill., will erect \$10,000 residence.

Fla., Palatka.—H. A. Davis awarded contract to F. J. Cunningham for erection of two dwellings to cost \$32,000.

Fla., Palatka.—L. C. Canova awarded contract to F. J. Cunningham for erection of two dwellings to cost \$3,000.

Fla., Palatka.—Presbyterian Church awarded contract to F. J. Cunningham for erection of proposed \$2500 manse.

Fla., Palatka.—Dr. J. W. Darsey awarded contract to F. J. Cunningham for erection of \$2500 dwelling.

Ga., Atlanta.—W. E. Worley will erect two residences and bungalows; cost \$8,000 each.

Ga., Lagrange.—Mrs. F. P. Langley will erect \$5,000 dwelling; plans by Park A. Dallas, 1023 Candler Bldg., Atlanta, Ga.; two-story building; 44x42 feet; ordinary frame construction; fireplaces and grates; electric lighting.

Ga., Lagrange.—Ely R. Callaway awarded contract to Brazill & Thompson, Lagrange, for erection of \$3000 residence after plans by Park A. Dallis, 1023 Candler Bldg., Atlanta, Ga.; one story; ordinary frame construction; 46x59 feet; fireplaces and grates; construction commenced.

Md., Baltimore.—John F. Carter, Park Heights Ave. near Glenn Ave., has plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for five dwellings on Presbury street; two stories; brick; 14x42 feet; tin roof; furnace heat; cost \$7000.

Md., Baltimore.—Edward J. Gallagher Realty Co., Eastern and Lakewood Aves., will erect 46 dwellings on Grove street and Eastern avenue; two stories; brick; 14x43 feet; pressed-brick fronts; marble trimmings; furnace heat; cost \$7000.

Md., Baltimore.—Commercial Realty Co. is having plans prepared by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for eight dwellings on 5th street; two stories; cost \$12,500.

Md., Baltimore.—Thomas J. Flannery, Gwynn Oak and Hamilton Aves., will erect eight cottages at Howland Park; 10 rooms and bath; steam heat; gas and electric lights; sewer connections; two and a half stories.

Md., Baltimore.—J. Frank Pearson, 114 Law Building, has plans by Henry J. Tinley, 314 North Charles St., Baltimore, for three dwellings at Beulah Villas; frame; average 28x34 feet; cost \$12,000.

Md., Baltimore.—J. F. Armiger, Wilkens Ave., has plans by F. E. Beall, 213 St. Paul St., Baltimore, for dwellings on Madison street between Liberty and Independence streets, Waverly; 14 dwellings 14x44 feet; one store and dwelling 15x50 feet; two stories; brick; hot-air heat; gas lighting; cost \$12,000; construction by owner.

Md., Baltimore.—Abraham I. Weinburg, Baltimore Bargain House, 204-220 West Baltimore St., is having plans prepared by Joseph Evans Sperry, Calvert Bldg., Baltimore, for residence on Park Heights avenue; cost \$15,000.

Md., Baltimore.—Charles D. Moore, Jr., 3400 Chestnut St., will erect store and dwelling at 2d and Chestnut streets, Hampden. (See "Miscellaneous Structures.")

Md., Baltimore.—Arthur F. Nicholson, Ferndale Ave., near Gwynn Oak Ave., purchased 24 lots at Harvard Park and will erect six cottages; ordinary construction; hot-water heat; gas and electric lighting; cost \$9000 each; plans and construction by owner.

Md., Baltimore.—Howard Realty Co. is having plans prepared by Stanislaus Russell, 2900 Clifton Ave., Baltimore, for two dwellings on Brighton street; two stories; cost \$5000 each.

Md., Baltimore.—George R. Morris, 808-810 Equitable Bldg., purchased site on Edgerton road, Lenox, and will erect residence.

Md., Howardsville.—George M. Boteler, 1525 West Fayette St., Baltimore, Md., awarded contract to W. Brooks, Baltimore, Md., for erection of residence; 34x36 feet; 2½ stories; cost \$5000.

Miss., Tyertown.—J. W. Caraway awarded contract to O. Hohlstein, Tyertown, for erection of residence.

Mo., St. Louis.—James R. Smith will erect residence.

Mo., St. Louis.—Theodore F. Berryhill will erect residence.

N. C., Wilmington.—H. B. Willson will erect two-story dwelling; frame; ordinary construction; slate roof; electric lighting; architect, L. A. H. Koeth, Room 2, Masonic Temple Bldg., Wilmington; will open bids October 18. (See "Machinery Wanted.")

N. C., Wilmington.—Frank L. Huggins will erect two-story dwelling; ordinary construction; brick veneer and shingles; shingle roof; hot-air heat; electric lighting; architect, L. A. Koeth, Room 2 Masonic Temple Bldg., Wilmington; will open bids October 20. (See "Machinery Wanted.")

Tenn., Chattanooga.—University of Chattanooga, H. S. Chamberlain, chairman building committee, Chamberlain Building, is having new plans prepared by Adams & Alaup, James Bldg., Chattanooga, for \$12,500 residence for university president; recent proposals for \$20,000 residence rejected; two stories, brick, with slate roof; hot-water heat; electric and gas lighting.

Tenn., Chattanooga.—O. S. and J. H. Overman, 515 Chamberlain Ave., awarded contract to G. W. McAmis, 908 George St., Chattanooga, for erection of two-story seven-room dwelling on Oak street; frame; shingle roof; cabinet mantels; electric and gas lighting.

Tenn., Knoxville.—J. Fritz Fox, 114 Pearl Pl., awarded contract to J. M. Dunn & Son

for erection of eight-room dwelling recently mentioned; heating undecided; frame; cost \$3000; plans by Baumann Bros., Knoxville.

Tenn., Memphis.—W. R. Gilbert, 401 South Boyd Pl., has plans by Eely & Weller, Memphis, for erection of residence recently mentioned; 34x34 feet; pressed brick and cement; mill construction; hot-air heat; electric lights; cost \$6000.

Tex., Houston.—J. P. Carter has plans by C. D. Hill & Co., Houston, for proposed residence; size 100x150 feet; outer walls dressed stone and gray Roman pressed brick; pillars to roof; gallery 14 feet broad, extending entire width in front and porte cochere; steam heat; garage and servants' quarters in rear.

Va., Lyonhurst (not a postoffice).—Frank Lyon has plans by Spelden & Spelden, 1403 New York Ave. N. W., for bungalow; two stories; brick and frame; shingled roof; 34x54 feet.

Va., Norfolk.—Curtis R. Hudgins awarded contract to Salmon & Moore, Norfolk, for erection of \$5000 brick and frame residence.

Va., Norfolk.—George M. Compere awarded contract to Merritt M. Salmon, Norfolk, for erection of residence in Lafayette Park; stone and brick; red tile roof; cost \$8000; plans by W. T. Zepp, Norfolk.

W. Va., Wheeling.—George Bowman awarded contract to Peddicord Bros., Wheeling, for erection of residence; cost \$7000.

W. Va., Wheeling.—Frank & David Evans awarded contract to Peddicord Bros., Wheeling, for erection of two residences.

## GOVERNMENT AND STATE BUILDINGS

Okl., McAlester.—Administration Building, etc.—State Board of Public Affairs awarded contract at \$206,960 to Texas Construction Co., Fort Worth, Tex., for administration building cell wing and steel cells for Oklahoma penitentiary.

Tex., Corsicana—Postoffice.—U. S. postoffice to be erected at Corsicana will be 60x35 feet; two stories; granite, pressed brick, terracotta, oak trimmings, marble and terrazzo; partly fireproof; generally wood construction; steam heat; electric and gas lighting; estimated cost, \$50,000; King Lumber Co., Charlottesville, Va., has contract for erection, as recently stated. (See "Machinery Wanted.")

Va., Fredericksburg—Postoffice.—A. B. Starnard, New York, was lowest bidder at \$49,600 for construction of postoffice lately mentioned.

## HOTELS

Ala., Fairhope.—Mrs. Clincock and Mrs. Morgan reported as having awarded contract to Mr. Ross, Mobile, Ala., to erect hotel; two stories; frame; L shaped; 50x90 feet; private bath for each suite or single apartment; cost \$5000; private wharf and bath-house contemplated.

Ark., Blytheville.—Blytheville Hotel Co. will receive proposals until October 15 on two-story hotel; plans, specifications, etc., can be seen at secretary's office at Blytheville or architects' office, Eely & Weller, 305 Royal Bldg., Memphis, Tenn.; contractors can obtain copies by depositing \$25 with architects.

Fla., Crainlyn.—Ocean Beach Hotel Co., Dr. J. N. Fogarty, president, recently noted incorporated to erect hotel at Crainlyn on Grassy Key, contemplates building 50-room frame or concrete structure; each room arranged to open on the outside; will also erect small cottages in connection; will construct wharf to deep water and develop 10-acre park surrounding hotel; desires correspondence with architects and contractors.

Ga., Claxton.—De Loach Hotel Co. will rebuild burned hotel. (Lately noted.)

Ga., Dublin.—J. B. Burch will erect hotel; steam heat.

La., Benson.—J. F. Rascoe will erect hotel and store building.

Mo., Kansas City.—D. Danciger will erect five-story hotel building; 70 rooms; steam heat; electric lighting; may install elevators; cost \$30,000; plans by E. P. Madorie, 722 Bryant Bldg., Kansas City; separate contracts. (Recently noted to be remodeled by E. P. Madorie.)

Mo., St. Louis.—Southern Realty & Financial Co., Louis Cella, president, contemplates erection of addition to American Hotel; 12 stories; white enameled terra-cotta exterior; building to contain 400 rooms, each with individual bath; estimated cost of improvements, \$1,000,000; plans by F. C. Bonsack, St. Louis.

N. C., Raleigh.—W. B. Wright will erect hotel; plans prepared.

Tenn., Cumberland Gap.—E. H. Ould and

R. N. Price, Middlesboro, Ky., will erect hotel at Cumberland Gap.

Tenn., Memphis.—Milton H. Smith, president Louisville & Nashville Railroad, Louisville, Ky., will, it is reported, erect \$300,000 hotel in connection with proposed station; 350 rooms; fireproof.

Tex., Boerne.—Dr. H. D. Barnitz, San Antonio, Tex., and associates will erect hotel to cost \$50,000; plans by Alfred Giles, San Antonio, Tex.

Tex., Temple.—Gulf, Colorado & Santa Fe Railroad, K. S. Hull, division superintendent, Temple, will, it is reported, erect \$90,000 Harvey restaurant.

Tex., Woodward.—D. J. Woodward, San Antonio, Tex., has plans for erection of \$25,000 hotel at Woodward. (See "Miscellaneous Enterprises.")

Va., New Castle.—Craig Healing Springs Co., G. W. Layman, president, awarded contract for erection of \$15,000 hotel recently mentioned; architect and contractor, M. E. Wood, Haymarket, Va.

W. Va., Grafton.—George M. Whitescarver has purchased Sherwood Hotel and will remodel it and adjoining building; plans are being prepared.

## MISCELLANEOUS STRUCTURES

Ala., Tuscaloosa.—Jail.—Tuscaloosa county awarded contract at \$30,000 to F. M. Dobson & Co., Montgomery, Ala., for erection of county jail recently mentioned.

Ark., Eldorado.—Elks' House.—Eldorado Lodge No. 1129, B. P. O. E. awarded contract to J. R. Randolph, Eldorado, for erection of proposed Elks' House; one story and basement; mill construction; steam heat; electric lighting; cost \$6500; plans by J. F. McKenzie, Eldorado, Ark.

Ark., Heber.—Jail.—Cleburne County Court appropriated \$2000 for erection of jail; Wm. Carey, County Judge.

Ark., Piggott.—Business.—W. D. Templeton will erect three brick business buildings.

Ark., Pine Bluff.—Board of Trade.—Board of Trade will erect building; three or four stories.

D. C., Washington.—Hospital.—Freedmen's Hospital, Pomeroy and 5th Sts., awarded contract to Page Construction Co., 303 Hibbs Bldg., Washington, for erection of wing; cost \$50,000.

Fla., Deland.—Jail.—Board of County Commissioners of Volusia county will receive bids until October 21 at office of clerk of Circuit Court, Deland, for furnishing material and labor for erection of jail and sheriff's residence; separate bids for steel and iron work and building; plans and specifications on deposit of \$5 with clerk of Circuit Court; certified check for 10 per cent. amount of bid; G. W. Fisher, chairman Board of County Commissioners; Samuel D. Jordan, clerk Board of County Commissioners.

Fla., Graceville.—Stores.—Findel & Williams will erect two concrete store buildings.

Fla., Key West.—Store.—Charles S. Johnson will erect concrete store building.

Fla., Lake City.—Business.—J. D. Futch will erect business building to replace burned structure; one story; brick; Ed Futch in charge of building.

Fla., St. Petersburg.—Business.—J. C. Blocker will erect business block; brick; 40x90 feet.

Ga., Atlanta.—Stores.—H. O. Reese will expend \$5000 on erection of stores recently mentioned; brick; 50x90 feet; ordinary construction; steam heat; electric lighting; freight elevators; plans made; no contract; day's work.

Ga., Dublin.—Store and Business.—J. B. Burch will erect three store buildings and several business buildings.

Ga., Griffin.—Stores.—J. H. Stevens awarded contract to Newton Coal & Lumber Co., Griffin, for erection of five store buildings; one story; plate-glass fronts; four 24x90 feet, one 30x90 feet.

Ga., Griffin.—Store.—W. J. Kincaid awarded contract to Gresham Manufacturing Co., Griffin, for erection of two store buildings.

Ga., Griffin.—Store.—B. B. Brown will remodel stable into store building; frontage 30 feet.

Ga., Rome.—Clubhouse.—Coosa Country Club has not set date of opening bids for erection of clubhouse recently mentioned; one-story-and-basement structure; bungalow type; fireplaces; gas lighting; plans by Park A. Dallis, 1023 Candler Bldg., Atlanta, Ga.

Ga., Savannah.—Store.—M. Wilinsky and J. Liebenstein will erect three store buildings.

Ga., Senola.—Business.—C. F. Hollberg had plans prepared by and awarded contract to

W. F. Cole & Son, Senola, for erection of business building recently noted (under Newnan, Ga.); two stories; brick and iron; fireproof construction; cost \$5000. (See "Machinery Wanted.")

Ga., Toccoa.—Business.—Toccoa Hide & Tallow Co. will erect business building; 18x40 feet; two stories; brick.

Ky., Fulton.—Business.—M. L. Farmer awarded contract for remodeling business block.

Ky., Lexington.—Barn.—J. B. Haggin, 15 Broad St., New York, had prepared plans by Anderson & Frankel, Lexington, Ky., for \$10,000 dairy barn and milkhouse in Fayette county; fireproof construction. (Recently noted.)

Ky., Lexington.—Business.—G. A. Roy, Nicholasville, Ky., has plans by Rowe & Giannini, Lexington, for business building; 30x90 feet; three stories and basement; ordinary construction; gas and electric lights; freight elevator operated by motor; cost \$12,000. (Recently mentioned.)

Ky., Middlesboro.—Business.—R. C. Ford, W. E. Cabell and W. J. Kinnauld will erect business building.

La., Ama.—Lodge.—Ama Camp, No. 2, Woodmen of World, will erect lodge building to replace building damaged by recent storm; one story with wing.

La., Estherwood.—Society.—Catholic Society will improve building and erect addition.

La., Gibsland.—Mercantile.—Reuben Sims will erect mercantile building.

La., New Orleans.—Hospital.—Charity Hospital will make improvements, including installation of two generators, laundry, ice plant, morgue with refrigerating facilities, and plumbing and lighting systems.

La., Winnfield.—Store.—Mrs. F. N. Holmes, Box 357, will rebuild store recently reported burned; plans by W. F. Cooper; brick structure; 37x100 feet; one floor; semi-fireproof; cost \$2000; R. Brown, probable contractor. (See "Machinery Wanted.")

Md., Baltimore.—Hall.—Junior Order United American Mechanics planning to erect \$75,000 hall; H. L. Mannerick, 1110 Light St., State Recorder.

Md., Baltimore.—Store and Dwelling.—Chas. D. Moore, Jr., 3400 Chestnut St., will erect store and dwelling at 2d street and Chestnut avenue, Hampden; two stories; brick; cost \$3500.

Md., Baltimore.—Store.—Eutaw Street Methodist Church awarded contract to John J. Moylan, 2462 Greenmount Ave., Baltimore, for erection of store at Eutaw and Mulberry streets previously mentioned; two stories; 20x50 feet; cost \$11,000; plans by King & Barnes, Eutaw and Mulberry streets, Baltimore.

Md., Cumberland.—Association.—Young Men's Christian Association planning to expend \$15,000 for improvements to association building; will erect two additional stories; A. May, Cumberland, Md., awarded contract for improvements to old part; contract for new building not yet; ordinary construction; steam heat; passenger elevator; natural gas, gas and electric lighting; plans by Harding & Upman, Washington, D. C.; R. Walter Lynch, 21 Charles St., general secretary. (See "Machinery Wanted.")

Miss., Beauvoir.—Soldiers' Home.—Beauvoir Soldiers' Home, J. K. Mosly, superintendent, is planning to enlarge and improve institution.

Miss., Jackson.—Store and Office.—R. W. Millsaps will erect six store and office buildings; site 70x180 feet.

Miss., Monticello.—Lodge.—Woodmen of the World, Camp No. 162, will erect lodge building; 35x70 feet; two stories; concrete block; Alphonso Russell, J. Z. McGuffee and John H. Williams, building committee.

Miss., Vicksburg.—Carhouse.—Vicksburg Traction Co. will erect carhouse.

N. C., Clayton.—Orphanage.—Knights of Pythias will erect two-story orphanage building; ordinary construction; pressed brick and stone; slate roof; hot-air heat; electric lighting; cost \$15,000; architect, L. A. H. Koeth, Room 2 Masonic Temple Bldg., Wilmington; will open bids about November 15.

N. C., Jacksonville.—Market and Restaurant.—T. W. Brock will rebuild structure recently reported burned; 20x70 feet; two stories; brick; plans indefinite. (See "Machinery Wanted.")

Okl., Bartlesville.—Lodge.—Eagles' lodge will erect two-story brick building.

Okl., Bartlesville.—Lodge.—B. P. O. Elks will erect lodge building two or three stories high.

Okl., Hugo.—Store.—Homer D. Eddins, Paris, Tex., had plans prepared by and awarded contract to W. D. Lester, Hugo,



Okl., for furniture-store building recently mentioned; one story; 25x100 feet; electric lighting; cost \$2500.

Okl., Tulsa—Hospital.—Tulsa Hospital Association, Fred S. Clinton, M.D., president, will erect two-story brick addition; 12 rooms; 32x32 feet; mill construction; gas and electric lighting; will install sterilizers and other equipment; heating plant not decided, within \$8000; plans prepared by and contract awarded to C. L. Reeder, Tulsa, Okla. (Recently noted.)

Okl., Tulsa—Business.—Love & McMurtry will erect business block; two stories; brick; 50x140 feet; cost \$12,000.

Okl., Tulsa—Lodge.—J. H. Simmons will open bids about October 18 for erection of lodge building recently mentioned; three stories and 10-foot basement; 40x90 feet; pressed brick; plate, prism and art glass; plumbing; gasfittings; electric lighting; natural gas heating; cost \$25,000; plans by Mathews & Cross, Tulsa.

S. C., Union—Business.—Mrs. John A. Fant will erect store building.

Tenn., Chattanooga—Lodge.—Keystone Pythian A. C., Alex. Scott, president, has not yet selected architect for remodeling building for lodge purposes; three stories and basement; fireproof; electric lights; heating plant not decided; cost \$20,000; will open bids during October. (Recently mentioned.)

Tenn., Knoxville—Exposition.—Appalachian Exposition Co. will erect exposition building 150x400 feet. (See "Miscellaneous Enterprises.")

Tenn., Knoxville—Woman's Building.—Lyceum Art Museum Building, Mrs. G. F. Mellen, president, awarded contract to Beaumont Company, Knoxville, for erection of proposed annex—Woman's Building; plans call for auditorium 60x40 feet; brick and cement; one story, including roof garden; seating capacity 800; cost \$6000.

Tenn., McMinnville—Store and Offices.—F. H. Badger has plans by Jas. Morrison for store and office building recently noted; four stories; 32x30 feet; ordinary construction; electric lighting; electric elevators; cost \$5000. (See "Machinery Wanted.")

Tenn., Memphis—Clubhouse.—Young Men's Hebrew Association and Rex Club awarded contract to Olson & Lesh, Memphis, for erection of clubhouse recently mentioned; three stories and basement; brick and terra-cotta trimmings; interior hardwood throughout; tiled floors; will contain gymnasium, natatorium, dance hall, roof garden, etc.; cost \$75,000; plans by Jones & Furbinger, Memphis.

Tex., Abilene—Business.—L. A. Pires, Dallas, Tex., will erect brick business building.

Tex., Bay City—Jail.—Matagorda county has voted \$20,000 of bonds to erect county jail. Address County Commissioners.

Tex., Dallas—W. Frank Knox will erect residence; two stories; nine rooms; cost \$5000.

Tex., Fort Worth—Business.—James F. Moore has purchased sites and will erect three business buildings.

Tex., Houston—Hospital.—Galveston, Harrisburg & San Antonio Railway Co., T. Fay, president, will erect hospital building; slow combustion type; center 36x37 feet; right wing 30x101 feet; left wing 30x51 feet; three stories and basement; own heating and ventilating plant; elevator; steel rolling shutters on windows; laundry; tiled floors and walls in operating-rooms; masonry and brick construction; interior walls finished in hard cement plaster; drainage systems; construction in charge of D. K. Colburn, engineer of buildings and bridges, Houston.

Tex., Nixon—Business.—D. J. M. Fly will erect two-story brick business building; cost \$10,000.

Tex., Sinton—Business.—W. R. Davis will erect three-room two-story business block; brick; 80x150 feet.

Tex., Sulphur Springs—Business.—B. F. Crosby will erect brick business building.

Tex., Waco—Sanitarium.—A. J. Barton is chairman committee interested in erection of Baptist sanitarium, probably at Waco.

Va., Manchester—Car Barns.—Virginia Railway & Power Co. purchased site and will erect car barns.

Va., Norfolk—Store.—H. Crocker is having plans prepared by Neff & Thompson, Norfolk, for store building; three stories; stone, steel and brick construction; 60x300 feet; plate-glass front on first floor.

Va., Norfolk.—Norfolk Light Artillery Blues will receive bids in next 15 days for erection of clubhouse recently mentioned; brick and stucco construction; steam heat; electric lights; cost \$15,000; plans by J. Kevan Peebles, Law Bldg., Norfolk.

Va., Phoebus—Store.—J. F. Grant will erect store building; two stories; brick.

Va., Portsmouth—Ferry Terminal.—Ferry Company awarded contract to Stroud & Hook, Portsmouth, for erection of ferry terminal building; cost \$3500.

Va., Richmond—Business.—Hofheimer Bros. will erect business building.

W. Va., Bluefield—Business.—Amicon Fruit Co. awarded contract to W. T. Owen, Bluefield, for erection of proposed business building; 30x100 feet; four stories; fireproof construction.

### MUNICIPAL BUILDINGS

Ala., Birmingham—Fire Station.—City has begun construction work on Fountain Heights fire station; cost \$5000.

D. C., Washington—Engine-house.—Commissioners District of Columbia (Henry B. F. Macfarland and others) are having plans made for engine-house on G street, between 20th and 21st streets; No. 23 Engine Company.

Ga., Augusta—Fire Station.—Fire Committee recommended contract for erection of fire station be awarded to J. H. McKenzie's Sons at \$22,048; front of pressed brick. (Lately noted.)

Ga., Crawford—City Hall.—City will erect city hall. Address The Mayor.

La., Alexandria—Fire Station.—City has purchased site for \$2000 and will erect fire station No. 2; J. P. Turregano, Mayor.

Md., Baltimore—Engine-house.—City awarded contract to James F. Farley, 43 Franklin Bldg. (recently mentioned as competitive bidder), for erection of engine-house; 48x100 feet; mill construction; steam heat; cost \$25,000; plans by C. E. Anderson, 324 North Charles St., Baltimore.

Md., Baltimore—Bathhouse.—Free Public Bath Commission, 131 South High St., contemplates construction of bathhouse at Monument and Dallas streets, to cost \$35,000.

Md., Baltimore—Truckhouses.—City has reawarded contract for erection of truckhouse on Gorsuch avenue to James F. Farley, 43 Franklin Bldg., Baltimore; two stories; cost \$25,000; plans by C. Montgomery Anderson, 324 North Charles St., Baltimore.

Miss., Brookhaven—Fire Station.—City will erect fire station; brick; two stories. Address The Mayor.

Okl., Oklahoma City—Jail.—City lately noted as having awarded contract for erection of jail has rejected all bids; will change plans and readvertise for new bids; \$35,000 to cover cost of jail and fittings.

Tenn., Memphis—Storage.—Ennis M. Douglas, City Register, received bids until October 14 for erection and completion of brick storage-room at City Hospital; plans and specifications on file at office of A. A. Chisholm, 634 Schmitz Bldg., Memphis; certified check for \$250 must accompany each bid; usual rights reserved.

Tex., Fort Worth.—City voted October 12 on issuance of \$65,000 bonds for erection of fire halls. Address The Mayor. (This supersedes previous action.)

Tex., San Antonio—Stadium.—City will probably call for competitive plans for erection of stadium. Address The Mayor.

### RAILWAY STATIONS

Ga., Fitzgerald.—Atlanta, Birmingham & Atlantic Railway awarded contract to Carr & Co., Atlanta, Ga., for erection of concrete passenger station lately mentioned; estimated cost, \$10,000.

Ga., Waycross.—Atlantic Coast Line Railway, J. R. Kenly, general manager, Wilmington, N. C., will erect passenger station; pressed brick; slate roof; cost \$100,000; plans have been prepared.

Md., Hagerstown.—Western Maryland Railroad Co., H. R. Pratt, chief engineer, Hillen Station, Baltimore, Md., plans expenditure of \$150,000 for improvements, to include erection of passenger station.

S. C., Spartanburg.—Southern Railway, D. W. Lum, chief engineer, Washington, D. C., will erect freight depot; brick and frame; two stories.

Tenn., Jackson.—Nashville, Chattanooga & St. Louis Railway, H. McDonald, chief engineer, Nashville, Tenn., will erect passenger station recently reported; size 29x96 feet; brick; tile roof; hot-water heat; electric lighting; cost \$12,000; contractor, Geo. Moon & Son, Nashville, Tenn.

### SCHOOLS

Ark., Camden.—School Board awarded contract to J. D. Johnson, Texarkana, Ark., for erection of high-school building recently mentioned; two stories and basement; 85x79

feet; brick; slate roof; pressed-brick exterior; ordinary construction; direct and indirect steam heat; electric lighting; ventilating machinery; cost \$30,241; plans by H. R. Carter, Texarkana, Ark. (See "Machinery Wanted.")

Ark., De Witt.—De Witt Special School District awarded contract for erection of school; two stories; brick; six rooms; warm-air heat; cost \$18,100.

Ark., Hamburg.—City awarded contract to Nolly Bros., Hamburg, for erection of two additions to school; 30x50 feet each; brick; cost \$10,000; plans by Frank M. Tibb, Little Rock, Ark.

Ark., Piggott.—City will erect \$30,000 brick school. Address The Mayor.

D. C., Washington.—City will erect five portable schools; probably erected by Government workmen; \$9000 available; Snowden Ashford, 1508 21st St. N. W., Washington, municipal architect.

D. C., Washington.—District of Columbia opened and rejected proposals on proposed five portable schools; one each adjacent to Orr and Chevy Chase schools and three adjacent to Armstrong Manual Training School; new proposals asked on millwork, lumber, etc., or on completed portable buildings; S. Ashford, 1508 21st St. N. W., municipal architect.

D. C., Washington.—District of Columbia had plans prepared by T. J. D. Fuller, 813 15th St. N. W., Washington, for four-room brick addition to Monroe School, to be connected by passage; main halls and stairways fireproof; non-fireproof class and cloak rooms; hot-air heat (located under terrace); gas lighting; cost \$30,000; bids, not yet advertised, to be opened about November 1.

Fla., Bonifay.—City contemplates issuing \$15,000 bonds to erect school. Address The Mayor.

Fla., Lakeland.—City will vote November 18 on \$65,000 bond issue to erect schools for improvements to water and electric-light systems. Address The Mayor.

Ga., Atlanta.—Georgia School of Technology, K. J. Matheson, president, will erect hospital recently noted; brick veneer; steam heat; gas and electric lighting; will install hospital equipment; bids will open probably in December; cost within \$20,000; architect not selected.

Ga., Decatur.—City has awarded contract at \$12,000 to Acworth Construction Co., Decatur, for new high-school building; separate contract for heating and plumbing.

Ga., Gainesville.—Brenau College, H. J. Pearce, president, will erect dormitory for 50 students.

Ga., Hazelhurst.—City will erect two-story school building; 10 classrooms and auditorium; ordinary construction; pressed brick; Indiana limestone trimmings; tin roof; hot-air heat; electric lighting; cost \$10,000; architect, L. A. H. Koeth, Room 2 Masonic Temple Bldg., Wilmington, N. C.; will open bids November 1. (See "Machinery Wanted.")

La., Garyville.—St. John the Baptist parish is planning to erect school; A. C. Bernard, parish superintendent.

La., Maringouin.—Iberville parish will rebuild school damaged by storm and repair other damaged schools. Address Police Jury.

Miss., Fulton.—Agricultural High School will erect high-school building to cost \$75,000; plans not decided; architect not engaged; building of ordinary construction; heaters. Address T. A. Senter.

Miss., Poplarville.—Pearl River County Agricultural High School Board, S. T. G. Bilbo, secretary, is having plans prepared by O. B. Cogle, Poplarville, Miss., for proposed main school and auditorium building; two stories and basement; probably ordinary construction; brick; electric lighting; heating not decided; cost within \$20,000.

Mo., Caruthersville.—Board of Education will receive bids until November 1 for erection of three-story brick high school; plans and specifications on file at office of Miller & Opel, architects, Jefferson City, Mo., and of H. C. Schultz, secretary of board, Caruthersville.

Mo., Columbia.—Board of Education will receive bids until October 20 for erection of high school; certified check for \$2000, payable to John L. Henry, secretary; plans and specifications on file at office of William B. Ittner, architect, 9th and Locust Sts., St. Louis, Mo., or at office of secretary. (Recently mentioned.)

Mo., Springfield.—Company will be incorporated with \$10,000 capital stock to erect and operate dormitory and boarding-house in connection with State Normal School.

N. C., Murphy.—City awarded contract to W. M. Jordan, Greenville, S. C., for erection of school building; 65x104 feet; two stories

and basement; brick; metal-shingle roof; steam heat; electric lighting; cost \$20,000; separate contract for heating and plumbing; plans by F. H. & J. G. Cunningham, Greenville, S. C. (Recently incorrectly noted under Murphy, S. C.)

N. C., Tryon.—Tryon Graded School Trustees have plans by F. H. & J. G. Cunningham, Greenville, S. C., for school previously mentioned; about 48x60 feet; two stories and basement; auditorium to seat 400; hot-air heat; cost \$6200.

Okl., Capitol Hill.—District No. 54 will erect two buildings recently noted; architect not selected; fireproof construction; natural-gas heating; electric lighting; cost \$17,000 and \$28,000; will want bids. Address M. Donnelly, Mayor.

Okl., Oklahoma City.—City awarded contract at \$30,000 to Gross Construction Co., Oklahoma City, for erection of High Street School and at \$29,150 to Oklahoma Construction Co., Oklahoma City, for erection of Culbertson Heights School; both two stories; eight rooms.

Okl., Vinita.—Board of Education, Davis Hill, president, will let contract October 30 for erection of \$55,000 high school and \$10,000 ward school buildings recently mentioned; plans by Bryan Architectural Co., St. Louis, Mo., and McAlester, Okla.

S. C., Abbeville.—School building (contract recently noted awarded to W. M. Jordan) will be two-story-and-basement structure; brick; metal-shingle roof; cost \$20,000.

S. C., Columbia.—Columbia College is having plans prepared by Shand & La Faye, Columbia, for rebuilding burned structures. (Recently mentioned.)

S. C., Enoree.—City contemplates erection of school. Address The Mayor.

Tenn., Ooltewah.—James county will issue \$10,000 of bonds to erect high school. Address County Commissioners.

Tex., Alvin.—City contemplates issuance of \$20,000 of bonds to erect brick and concrete school. Address The Mayor.

Tex., Austin.—Sam Houston School contemplates erection of \$10,000 industrial building.

Tex., Beaumont.—City will erect three schools with \$100,000 bond issue recently noted voted. Address The Mayor.

Tex., Fort Worth.—City is preparing to erect 12-room, basement and auditorium school in Second ward; two towers at entrance; heating plant in basement; fireproof construction; probably dark yellow Malakoff brick with white stone trimmings. Address The Mayor.

Tex., Goliad.—West Texas Industrial Academy will rebuild structure reported burned.

Tex., Hereford.—Bids will be received at office of Seth B. Holman, secretary School Board, until October 18 for erection of brick and stone school complete, including steam-heating plant, plumbing and electric wiring; certified check for \$500, payable to Board of School Trustees; plans and specifications on file at office of secretary as above; plans by I. F. Kauffman & Son, Amarillo, Tex. (Recently mentioned. See "Machinery Wanted.")

Tex., Houston.—Reagan School will erect gymnasium building.

Tex., Laredo.—City contemplates erection of \$20,000 school. Address The Mayor.

Tex., Llano.—Llano county will issue \$4000 bonds to erect school. Address County Commissioners.

Va., Cartersville.—Hamilton District School Board will erect \$7000 school building; six rooms and assembly hall; brick or concrete; slate roof; steam heat; no architect; bids opened March 1 or sooner; C. W. Dickinson, Jr., superintendent, Cartersville. (See "Machinery Wanted.")

Va., Norfolk.—Bids will be received by Neff & Thompson, architects, Seaboard Bank Bldg., Norfolk, until October 27, instead of October 18 as recently noted, for erection of proposed high school; 276x112 feet; fireproof; indirect heat; certified check for \$2000, payable to order of School Board; plans and specifications on file at Builders' Exchange, 15 East Fayette St., Baltimore, Md., until October 27; at Philadelphia, Pa., until October 19, and New York from October 20 to 27, or may be had from architects on deposit of \$50; Lawrence T. Royster, chairman School Board; appropriation \$250,000.

Va., Petersburg.—City has purchased two sites preparatory to erecting two schools. Address The Mayor.

W. Va., Glenville.—State Board of Control, Charleston, W. Va., will receive bids until October 18 for furnishing material and erecting complete three-story Normal School according to plans and specifications on file at offices of Herald-Dispatch, Huntington, W.

Va.; State Journal, Parkersburg, W. Va.; Intelligence, Wheeling, W. Va.; Professor Rohrbaugh, Glenville; C. W. Huston, Morgantown, W. Va., and of State Board of Control, Charleston, W. Va.; certified check for \$500; heating and plumbing as separate contract and according to proposals submitted; brick building; 120x40 feet; ordinary construction; steam heat; gas and electric lighting; cost \$30,000; John A. Sheppard, member Board of Control.

### THEATERS

D. C., Washington.—Fred H. Geyer, 1827 14th St. N. W., will erect theater on 14th street; 20x120 feet; seating capacity 250.

Md., Baltimore.—Waverly Amusement Co. has plans by Herbert C. Aiken, 213 North Calvert St., Baltimore, for erection of moving-picture theater on York road; 25x100 feet; brick; one story; ornamental plaster front; steam heat; electric lights; cost \$4000.

Mo., Kansas City.—Walter Hoff Seely, general manager, William Morris, Inc., will erect theater; construction to begin in 90 days.

Mo., St. Louis.—Oppenheimer Bros. have plans by F. C. Bonsack, St. Louis, for proposed improvements to Suburban Gardens, lately mentioned; about \$100,000 to be expended.

Tex., Galveston.—C. K. Jorgenson has leased Theatrum Building and will expend \$7000 in improvements; will install electric fans, ventilating and cooling machines, etc.

### WAREHOUSES

Ga., Savannah.—Geo. W. Lowden has plans by Percy Sugden, Savannah, for remodeling rice-mill buildings into four warehouses; two stories; pressed brick; F. Woillard, contractor.

Ga., Tallapoosa.—Farmers' Warehouse & Wholesale Co. (recently reported incorporated with \$5000 capital stock) will erect warehouse for cotton, wholesale groceries, etc.; mill construction; concrete; 50x200 feet; electric lighting; cost \$7000; W. W. Heaton, president; H. A. Jackson, vice-president; W. W. Summerlin, treasurer and general manager; A. V. Howe, secretary.

La., New Orleans.—Illinois Central Railroad, Hunter C. Leake, general agent at New Orleans, awarded contract at about \$200,000 to Jefferson Construction Co., New Orleans, for construction of four sheds and warehouses, each 80x155 feet; cost \$200,000. (Previously mentioned.)

Miss., Tylertown.—Ginn-McDonald Warehouse Co. awarded contract to George Linton of Tylertown for erection of warehouse.

Md., Baltimore.—Fred Bonhage has awarded contract to Charles L. Stockhausen, National Marine Bank Bldg., Baltimore, for erection of warehouse at 606 Water street; four stories; 39x80 feet; estimated cost, \$10,000; plans by Fred Wright.

Tenn., Nashville.—Thomas S. Marr awarded contract for erection of \$6000 warehouse for W. P. Hickerson as follows: Foundation work, M. R. Cockrill; brick work, J. H. Hutchison Sons Company; plumbing, Kane & Murray; roofing, Agerton & Robertson; carpenter work, W. T. Causey & Bro.; painting and glazing, W. G. Rippey; concrete work, Agerton & Robertson; all of Nashville. (Lately mentioned.)

Tenn., Limestone.—N. A. Morelock will remodel barn into warehouse; will erect additional story, etc.

Tex., Anahuac.—Anahuac Wharf & Warehouse Co. (recently reported incorporated by F. W. Lotz and others) will erect wharf and warehouse; latter to be 130x140 feet, for storing rice; wall 20 feet high; will be equipped with rice-cleaning machinery; cost \$6000 without wharf and equipment; Mr. Lotz is architect and contractor. (See "Machinery Wanted.")

Tex., Houston.—Southern Pacific Co., A. V. Kellogg, engineer maintenance of way, Houston, contemplates, it is reported, erection of warehouse; 122x84 feet; corrugated iron, glass and wood.

Tex., Houston.—Gaar-Scott Company will rebuild warehouse lately reported burned.

Va., Norfolk.—Board of Control granted permission to Chesapeake & Ohio Railway, L. Garrison, superintendent bridges and buildings, Richmond, Va., for erection of corrugated-iron building at terminals foot of Brooke avenue.

Va., Norfolk.—J. Johnson of Norfolk is lowest bidder at \$2800 for erection of warehouse for C. M. Bayne; building will be of brick and used for storing lime, plaster and cement; plans by Arnold Eberhard of Norfolk. (Recently mentioned.)

## RAILROAD CONSTRUCTION

### RAILWAYS

Ala., Panola.—The Alabama, Tennessee & Northern Railroad is reported pushing work on its extension south, and will reach Geiger by November 1. It is expected to continue construction to Ivy and Silas, Ala. Wm. Toxey is chief engineer at Cochrane, Ala.

Ark., Russellville.—An officer of the Missouri Pacific Railway writes that it has no interest in the survey reported between Lantonia and Russellville, Ark. This denies a recent press report.

Fla., Apalachicola.—The Apalachicola Northern Railroad, writes an official, will build a line 21 miles long from Apalachicola to St. Joseph, Fla. The Morey-Faulhaber Construction Co. of St. Louis, Mo., is the contractor. It is proposed to build docks at St. Joseph. R. B. Coleman of Apalachicola, Fla., is general manager for the road.

Ga., Brunswick.—An election will be held in November to vote on \$50,000 of bonds for the Georgia Coast & Piedmont Railroad to build an extension of about 18 miles from Darien to Brunswick. A De Sola Mendes is vice-president and general manager at Darien, Ga.

Md., Hagerstown.—The Western Maryland Railroad proposes spending \$150,000 for a new passenger station and other improvements at Hagerstown, which will include double-tracking through the city. H. R. Pratt is chief engineer at Baltimore, Md.

Miss., Fernwood.—The Fernwood Lumber Co. is asking bids for grading and clearing on a seven-mile extension of the Fernwood & Gulf Railroad from Tylertown eastward. About 86,000 cubic yards of earthwork is to be moved.

Mo., Mexico.—An officer of the Mexico, Santa Fe & Perry Traction Co. is reported as saying that general contract is let to Burns & Co., 705 Isabella Bldg., Chicago, for the line from Mexico south to Columbia and Fulton, and north to Santa Fe, Perry and Hannibal, Mo., 203 miles altogether. Construction will begin about November 1. Sub-contracts are to be let.

Mo., Rolla.—J. C. Harrington of Indianapolis, Ind., is reported to represent the Carnegie Trust Co. of New York in an inspection of the route for the proposed Missouri Inland & Southern Railway from Rolla to Licking, Mo., 40 miles. E. E. Young is president of the road.

N. C., Aberdeen.—The Aberdeen & Rock Fish Railroad is reported to have finished an extension from Ræford to Wagram. Other construction may be done. John Blue of Aberdeen, N. C., is president and general manager.

N. C., Asheville.—The Asheville & East Tennessee Railroad Co. contemplates building an extension from Weaverville to Galax, on the Carolina, Clinchfield & Ohio Railroad, about 38½ miles, and it is proposed to ask for county bond issues in aid of the line. R. S. Howland of Asheville is president.

N. C., Jefferson.—Concerning the report that the Virginia-Carolina Railroad Co. would build an extension to Jefferson, N. C., the Manufacturers' Record is informed that nothing definite has been decided. Address Abingdon, Va.

N. C., North Wilkesboro.—An officer of the Southern Railway is reported as saying that it is not contemplated to build a connecting line between North Wilkesboro, N. C., and Mountain City, Tenn. This refers to a recent report.

Okla., Ardmore.—W. T. Forsythe of St. Louis has begun survey for the proposed interurban railway from Ardmore to Chickasha promoted by Oscar Ayers.

Okla., Bartlesville.—New York financiers are contemplating construction of the Joplin, Oklahoma & Western Railway promoted by Frank Overlees and associates. Joseph Caccavaio is engineer. C. J. Bucy is also reported promoting a line between Joplin and Bartlesville, together with Franklin Smith of Joplin, Mo., and others.

Okla., Enid.—The Enid & Central Oklahoma Traction Co., according to a report quoting an officer, will let contracts about November 1 to build about 65 miles of line from Enid to El Reno, Okla., via Waukomis, Biscan, Hennessey, Okarchee, Dover, Kingfisher and Darlington. Maximum grade, 1.5 per cent; maximum curve, 8 degrees outside of town. A steel bridge with masonry supports will be built over the Cimarron River, 900 feet; also several smaller bridges.

Okla., Hobart.—The Rock Island system is surveying for an addition to its local yards. J. B. Berry of Chicago is chief engineer.

Okla., Sallisaw.—President J. E. Cavanaugh

of the Sallisaw, McAlester & Southern Railway Co. writes that the proposed line will be 190 miles long, excluding branches, from Sallisaw, Okla., to Honey Grove, Tex., via Sequoyah, Haskell, Latimer, Pittsburg, Atoka, Pushmataha and Choctaw, Okla., and Bryan county, in Texas. Bridges will be needed over the Canadian, Arkansas, Bogie and Red rivers. Two tunnels, each a quarter mile long, are required. M. J. Smith, McAlester, is engineer in charge, and construction is under way south of McAlester by J. C. Wilkinson. More bids will be opened about November 1. Average of 20,000 cubic yards per mile excavation. Maximum grade, six-tenths of 1 per cent; maximum curves, 3 degrees. The other officers are William P. Freeman, vice-president; Milton J. Smith, chief engineer; Andrew Ringland, assistant engineer, all at McAlester, Okla. The other directors are Arnold C. Saportas, Shirley M. Eaton and C. W. Youngman of New York, and J. T. McCleary of Washington, D. C.

Okla., Shawness.—C. P. Edwards and A. Hargrave have proposed to the Chamber of Commerce to build an interurban electric railway from Shawnee to Oklahoma City, about 40 miles and survey has been made. The offer has been accepted and subscriptions for \$50,000 of stock are to be made. Route is via Dale, McLoud, Harrah, Choctaw City and Spencer.

Okla., Tulsa.—An officer of the Mid-Continent Traction & Power Co. writes that 16 miles are under construction, to be completed within six months, connecting Tulsa, Taneha, Sapulpa and the oil fields. Total line is to connect Miami and Shawnee, Okla., 200 miles. The officers are Graham Burnham, president and general manager; J. Robert Burnham, vice-president and engineer, both at Tulsa, Okla.; L. J. Weatherwax, secretary, Sapulpa, Okla.; F. O. Brown, treasurer, Red Fork, Okla. Eastern traction interests have financed the line.

Okla., Wilburton.—The Missouri, Kansas & Texas Railway, it is reported, contemplates building an extension from Wilburton, Okla., to Mena, Ark., 60 miles, which may be finally extended to Hot Springs and Little Rock. S. B. Fisher is chief engineer at St. Louis, Mo.

S. C., Greenville.—The Greenville, Greenwood & Augusta Railroad Co., lately chartered, has organized by electing directors as follows: Henry Briggs, president and treasurer; J. P. Charles, secretary; Frank Hammond, all of Greenville; J. C. Fawcett and H. L. Zimmerly of New York.

Tenn., Dyersburg.—John H. Watkins of New York, formerly of Memphis, and S. G. Latta and Ernest Rice of Dyersburg, Tenn., are reported to have bought the Dyersburg Northern Railroad, 31 miles long, from Dyersburg to Tiptonville, and may extend it to Hickman, Ky., about 50 miles.

Tenn., Gainesboro.—Rutledge Smith, for the Alabama, Tennessee & Kentucky Railroad Co., has made a proposition to the Jackson County Court to build a standard-gauge steam railroad from the coal fields in Cumberland, Van Buren and Sequatchie counties, thence through White, Putnam and Jackson counties to the Cumberland River, and thence to Hodgenville, Ky. An election to vote on \$100,000 of bonds is to be held December 11.

Tenn., Mt. Pleasant.—A movement is under way to build a railroad from Mt. Pleasant to Leatherwood, Tenn., 18 miles, and \$71,000 are reported subscribed in Maury county, while Nashville is asked to subscribe \$29,000. J. W. Howard, John H. Carpenter, D. W. Shofner, L. L. Frierson, H. B. Howard and others of Mt. Pleasant are interested.

Tenn., South Pittsburg.—Construction is reported begun at Richard City, a suburb, for five miles of railroad to the property of the Tennessee River Coal Co., in King's Cove. R. A. and B. F. Patton, together with J. N. Deitzen, have the contract.

Tex., El Paso.—The San Diego, El Paso & St. Louis Railway has made surveys from El Paso via Hope, N. M., and Artesia to Vernon or Quanah, Tex. Two-thirds will be earthwork and one-third rock. Three bridges, two viaducts and five tunnels are necessary. A. Courchene of El Paso is president and P. A. McCarthy of Houston, Tex., is chief engineer.

Tex., Georgetown.—An officer of the International & Great Northern Railroad says that there is absolutely nothing in the press report that it is surveying for an extension from Georgetown to Florence, Tex.

Tex., Glen Rose.—A. L. Sadler writes that the Glen Rose & Walnut Springs Railroad Co. has not elected permanent officers, but work has begun on the proposed line from Glen Rose to Walnut Springs, 12½ miles, which will require three short bridges. T. M. Simpson of Dallas, Tex., is engineer. Right

of way is being cut out and grading is going on.

Tex., Grand Saline.—Concerning the report that the Texas Short Line would be extended from Alba to Paris, Tex., the Manufacturers' Record is informed that the extension will not be made for 90 days. T. B. Meeks is president at Grand Saline.

Tex., Jacksboro.—The Gulf, Texas & Western Railroad, which has been completed from Jacksboro to Olney, Tex., 41 miles, has finished about 20 miles of grade from Olney towards Seymour and Benjamin, Tex. Ben B. Cain of Dallas, Tex., is vice-president and general manager.

Tex., Longview.—Concerning the proposition to extend the Gulf, Colorado & Santa Fe Railway northward from Longview to iron-ore fields in Cass county, an officer writes that nothing definite can be stated at present.

Tex., Provident City.—A. Schlafi, chief engineer for Schlafi & Porter of Houston, who are surveying for the line of the Provident City Railway Right of Way Co., is reported as saying that contract will be let within 10 days and work begin before November 1. From Glen Flora, on the Santa Fe, the line is to run to Provident City and Ganado, while another branch connects Glen Flora and Pierce. Carey Shaw of Houston is president, and Lewis H. Scurlock of Kansas City, vice-president.

Tex., San Antonio.—Contract has been signed with J. F. Edwards, for \$100,000 bonus, to build a railroad southward from San Antonio to the Rio Grande, the construction of 60 miles to be started within 15 days. He is reported as saying that much other construction will be done in connection with this line. Address,ourdanton, Tex. Terrell Bartlett has begun survey.

Tex., Stamford.—An officer of the Stamford & Northwestern Railroad is quoted as saying that it is expected to have the line completed by October 15. Recently 58 miles from Stamford to Jayton were opened for operation.

Tex., Sugarland.—President W. T. Eldridge of the Sugarland Railway is reported to have completed arrangements for building 25 miles of spurs, and materials are being purchased. Address Sugarland, Tex.

Va., Hurley.—The Big Sandy & Cumberland Railroad is completing an extension of 15 miles along Knox Creek to a point within six miles of Grundy, Va. G. W. Litz is general manager at Hurley.

Va., Lynchburg.—President T. O. Troy of the Carolina-Virginia Western Railway is reported as saying that Walter Washabaugh, chief engineer, is pushing survey for the proposed line, which will start six miles west of Lynchburg and run to Danville, Va.; thence to Hall River.

Va., Norfolk.—An officer of the Norfolk & Portsmouth Belt Line writes that an extension into Norfolk is being considered, but nothing definite has been done.

Va., Tom's Creek.—The Virginia Iron & Coal Co., it is reported, will build a short railroad line to connect three coal mines with the Norfolk & Western Railway, the route being along Little Tom's Creek. C. S. Churchill is chief engineer of the Norfolk & Western at Roanoke, Va.

W. Va., Beckley.—A movement is reported under way to build an electric road from Beckley via Wickham, Eccles, Lester, Glen White and other points to Winding Gulf. The Mayor may be able to give information.

W. Va., Fairmont.—The Fairmont & Northern Traction Co. has let contract to Talbot Bros. of Fairmont for an extension from Fairmont to Fairview, about five miles.

W. Va., Mannington.—The Fairmont & Mannington Traction Co. has been granted a franchise in Mannington and will connect with the Morgantown & Dunkard Valley Electric Railway, which has also been granted a franchise and will build to Blacksburg, W. Va.

W. Va., Martinsburg.—An officer of the Baltimore & Ohio Railroad says that it is not contemplated to build the proposed cut-off line from Hedgesville to Peachers Mill at present. This denies a recent press report.

W. Va., Morgantown.—An officer of the Morgantown & Kingwood Railroad writes, concerning the rumor that an extension will be made from Rowlesburg to Parsons, W. Va., that nothing has been done since a survey was made several years ago, but not by that company.

W. Va., Mullens.—The Virginia Railway is reported to have completed 19 miles of its branch along Winding Gulf, which will reach Pemberton, about five miles farther.

W. Va., Williamson.—The Norfolk & Western Railway, it is reported, will extend its



yards at Williamson. C. S. Churchill is chief engineer at Roanoke, Va.

### STREET RAILWAYS

Ga., Macon.—A petition has been filed to charter the Macon Traction Co. to build a line 3½ miles long from Fort Hill street, on the Jeffersonville road, along that highway to Cross Keys, and thence along the Masseyville road to the Recreation Club; capital stock, \$150,000. The incorporators are Jesse B. Hart, C. C. Foor, Frederick Kauffman, H. V. Napier, Jr., Roland Ellis, N. J. Ethridge, Howard Smith, Leon S. Dure, J. F. Hart and J. J. Quinlan.

Tenn., Chattanooga.—A resolution has been adopted by the City Council granting an electric street-railway franchise to D. J. Duncan and associates.

Tex., Austin.—The County Commissioners have let contract to Walter Tips of Austin for rails for double tracks over the Colorado River Bridge for the street railway. The contract includes ties, splice bars, bolts and nuts. Another contract will be let for laying the track.

Tex., Dalhart.—W. J. Blair and associates have been granted an electric street-railway franchise, one mile to be done in 12 months, from Rock Island street to the Fair Grounds.

W. Va., Wheeling.—The Wheeling Traction Co., it is announced, will extend its line to Rayland.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressor.—Citizens' Auto Co., Hobart, Okla., wants prices on small air compressor for garage.

Alfalfa Machinery.—Edgar B. Marchant, Pecan-Alfalfa Production Co., Clinton, Okla., will want prices on gasoline-driven machinery for cutting, raking and handling alfalfa.

Automobile.—W. V. Moore, West End, Va., wants prices on second-hand automobile; five or six seating capacity; equipped with magneto; state make, etc.

Automobiles.—Auto Service Co., J. R. Brumby, Jr., president, Marietta, Ga., wants prices on new or second-hand motor cars and "busses."

Bank Fixtures.—A. E. Holman, Dyer Bldg., Augusta, Ga., wants prices on bank fixtures.

Baskets.—J. C. Layman Company, Bristol, Va.-Tenn., wants carload of baskets.

Baskets.—J. C. Layman Company, Bristol, Va.-Tenn., wants car of half-bushel and peck baskets, with a few round bushel baskets included.

Bath Fixtures.—R. Walter Lynch, general secretary Y. M. C. A., Cumberland, Md., wants prices on bath fixtures.

Belting.—Geo. H. Alexander, Doe St., Birmingham, England, wants to represent American manufacturers of belting.

Blackboards.—Hamilton District School Board, C. W. Dickinson, Jr., superintendent, Cartersville, Va., wants prices on blackboards.

Boiler.—See "Heating Plant."

Boiler.—American Box Co., Lynchburg, Va., wants second-hand 100 to 150-horse-power fire-box boiler (economic or internal fired, or portable on wheels.)

Brick.—R. Walter Lynch, general secretary Y. M. C. A., Cumberland, Md., wants prices on brick for bathrooms, etc.

Bridge.—York Furnace Bridge Co., Box 33, Lancaster, Pa., will receive bids until October 16 for construction of steel cantilever bridge over Susquehanna River, near York Furnace Springs; state price for concrete piers and abutments by cubic yards; plans and specifications may be obtained at 140 North Queen street, Lancaster.

Bridge Construction.—Randolph County Commissioners, S. A. Rowen, clerk, Elkins, W. Va., will receive bids until October 15 for

construction of steel bridge across Leading Creek, and for such changes in abutments already constructed as may be necessary.

Bridge.—Ennis M. Douglass, City Register, Memphis, Tenn., received bids October 7 for furnishing all material, labor, etc., for construction of reinforced concrete bridge at Bayou Gayoso, on Winchester avenue, and construction of reinforced concrete culvert on Wester avenue; plans and specifications on file at office of City Engineer; certified check for \$250 must accompany each bid; usual rights reserved.

Bridge Construction.—Board of Supervisors of King William county, King William, Va., will receive plans and proposals until November 1 for construction of steel bridge over Harrison Creek; abutments to be of concrete; floor of white oak two inches thick; length 38 feet; width 12 feet inside of hand railing; height 7 feet from bed of creek.

Bridges.—Board of Control, Wheeling, W. Va., will receive bids until October 16 for construction of steel work on superstructure of Market-street bridge, and until October 25 for concrete reinforced covering for roadway, sidewalks, hand railing, paving of bridge floor and bridge approaches; plans and specifications on file at office of Hermann Laub, construction engineer, Lewis Block, Pittsburgh, Pa., and at office of City Engineer, Wheeling; certified check for \$1000 must accompany each proposal; usual rights reserved.

Building Materials.—King Lumber Co., Charlottesville, Va., wants prices on granite, brick (common and gray pressed), ornamental terra-cotta, plumbing, electrical work and mill work.

Building Materials.—Hamilton District School Board, C. W. Dickinson, Jr., superintendent, Cartersville, Va., wants prices on iron finishings, sash and doors, steel ceiling, etc., for \$7000 school building.

Cars.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and South Penn Square, Philadelphia, Pa., wants 15 to 20 standard-gauge rack cars (coke preferred).

Cars.—Chickasha Cotton Oil Co., Chickasha, Okla., wants three to five steel-frame tank cars of 8000 gallons capacity.

Cars.—Macon County Brick Manufacturing Co., Oglethorpe, Ga., wants 25 to 40 double-deck dry (brick) kiln cars.

Chairs.—C. P. Walford, clerk, Richmond, Va., will receive bids until October 18 for furnishing, delivered and screwed to floor at John Marshall High School building, sufficient number of chairs to equip same; certified check for \$350 must accompany each proposal; proposals must be sealed, addressed "School Board, City of Richmond, Va., City Hall," and marked "Proposals for Auditorium Chairs."

Concrete Cisterns.—Wm. M. Smith, acting Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C., will receive bids until November 6 for concrete cistern at U. S. naval station, Key West, Fla.; plans and specifications can be obtained on application to bureau or to commandant of Navy-yard; proposals must be endorsed "Proposals for Concrete Cisterns."

Concrete Cisterns.—Sealed proposals in triplicate for constructing seven reinforced concrete cisterns at Fort Moultrie, S. C., will be received until October 23; information furnished on application; United States reserves right to accept or reject any or all bids. Intending bidders should forward certified check for \$10, payable to Constructing Quartermaster, Fort Moultrie, Moultrieville, S. C., to secure plans, etc., said check to be returned when plans, etc., are returned. Envelopes containing proposals should be marked "Proposals for Dredging," Fort Moultrie, S. C., addressed Constructing Quartermaster.

Desks.—Hamilton District School Board, C. W. Dickinson, Jr., superintendent, Cartersville, Va., wants prices on school desks.

Drykiln.—W. S. Askew Company, Newnan, Ga., wants drykiln, 8000 to 10,000 daily capacity.

Electric Fixtures.—L. A. H. Koeth, Room 2 Masonic Temple Bldg., Wilmington, N. C., wants prices on electric fixtures.

Electric Lights.—P. H. Lovejoy, Mayor, Hawkinsville, Ga., will receive bids until October 15 for machinery and material for electric-lighting system in and for city of Hawkinsville; system to embrace building, engine, generators; boilers and pole-line materials; proposals, sheets, etc., on file at office of J. B. McCrary & Co., engineers, 1302 Empire Bldg., Atlanta, Ga.

Electric Machinery.—Margoliuss Company, P. O. Drawer 458, Norfolk, Va., wants two 10 to 15-horse-power 220-volt three-phase 60-cycle alternating-current standard motors.

Electric Wiring.—See "Heating Plant."

Electric Motors.—J. C. Steele & Sons, Statesville, N. C., want new or second-hand motors; one about 60 horse-power and one about 15 horse-power; alternating current, 60-cycle, 220-volt, three-phase.

Electrical Machinery.—See "Building Materials."

Electrical Machinery.—Index Printing Co., Atlanta, Ga., will open proposals December 1 for motors.

Electrical Machinery.—See "Locomotive."

Electrical Machinery.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and South Penn Square, Philadelphia, Pa., wants electrically driven hoist to handle three tons material per load at speed of 500 feet per minute, 350 feet vertical and about 1000 feet on slope, slope running about 35 degrees; ultimate length of hoist 2000 or 2500 feet; double-drum machine to be set up to hoist from two different shafts; 440 A. C. voltage, with single motor; also wants 90 to 100-horse-power motor, two-phase, 60 cycles, 2200 volts, wound secondary type, with external resistance, complete with belt-tightening slide base and immersed auto-starter; speed 580 or 690 R. P. M. at full load, the lower speed preferred.

Elevators.—Baldwin & Pennington, 330 North Charles St., Baltimore, Md., will receive bids until October 15 for furnishing and installing three electric freight elevators for State Tobacco Warehouse; plans and specifications on file at office of architects between 9 A. M. and 5 P. M.; contractor for work required to furnish loads for \$5000 guaranteeing to State of Maryland conditions of specifications; usual rights reserved.

Elevators.—R. Walter Lynch, general secretary Y. M. C. A., Cumberland, Md., wants prices on elevators.

Elevators.—Index Printing Co., Atlanta, Ga., will open proposals December 1 on elevators.

Engine.—See "Irrigation Machinery."

Engine.—See "Gasoline Engines."

Engine.—See "Gasoline Engine."

Fire-department Equipment.—Sealed bids will be received by City Clerk of Muskogee, Okla., until October 18 for following fire-department equipment: One 75-foot automatic aerial truck; two fire steamers—one first size, one second size; one automobile hose wagon with 35-gallon chemical tank, fully equipped, and all other necessary equipment for chief's wagon; one chief's auto wagon, with two five-gallon and two three-gallon fire extinguishers; telegraph fire-alarm system, 45 boxes; Pompey ladders, nozzles, deluge sets, hose jackets, relief valves, recording water gauges, etc.; 3000 feet cotton rubber-lined hose, 2½-inch, with couplings; photographs and samples of hose to accompany bids. For further information address J. L. Templeton, Chief of Fire Department.

Fire Engines.—Burt & Hicks, Biscoe, N. C., want to correspond with manufacturers of chemical fire engines; capacity 50 to 60 gallons.

Gas and Gasoline Engines.—Reliance Machine and Tool Works, Franklin and Chaney Aves., St. Louis, Mo., wants catalogues and full description of gas and gasoline engines for hoisting machines; engines of vertical type; 3 to 25 horse-power; simple construction; small floor space.

Gasoline Engine.—A. E. Holman, agent, Dyer Bldg., Augusta, Ga., wants two-horse-power gasoline engine.

Gasoline Engine.—See "Farming Implements."

Gasoline Engine.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and South Penn Square, Philadelphia, Pa., wants 5 to 10-horse-power gasoline engine.

Gasoline Engines.—Citizens' Auto Co., Hobart, Okla., wants prices on stationary gasoline engine, about four to six horse-power.

Gasoline Engines.—Anahuac Wharf & Warehouse Co., F. W. Lutz, Anahuac, Tex., wants prices on gasoline engines.

Glass.—Mrs. F. N. Holmes, Box 317, Winfield, La., wants prices on plate glass 84x84 inches and 60x84 inches.

Glass.—Rev. Samuel J. Rucker, Abilene, Tex., wants prices on art glass.

Glass Machinery.—W. H. Cook, Box 317, Durant, Okla., will want prices on glass machinery.

Glass Windows.—A. E. Holman, manufacturers' agent, Augusta, Ga., wants data and prices on memorial windows.

Heating Apparatus.—King Lumber Co., Charlottesville, Va., wants prices on heating equipment for U. S. postoffice at Corsicana, Tex.

Heating Apparatus.—Index Printing Co.,

Atlanta, Ga., will open proposals December 1 for heating apparatus for \$25,000 building. Heating Plant.—A. L. Myers, Newton, Miss., wants prices on steam-heating plant for sanitarium.

Heating Plant.—The Four Company, Union and Church Sts., Norfolk, Va., wants estimates on steam-heating plant.

Heating Plant.—Rev. Samuel J. Rucker, Abilene, Tex., wants prices on heating plant.

Heating Plant.—Hamilton District School Board, C. W. Dickinson, Jr., superintendent, Cartersville, Va., wants prices on boiler for steam-heating plant.

Heating Plants.—Board of School Trustees, Seth B. Holman, secretary, Hereford, Tex., will receive bids until October 18 for erection, steam-heating plant and plumbing and electric wiring of proposed high school; certified check for \$500, payable to the board; plans and specifications on file at office of secretary as above.

Hoist.—See "Electrical Machinery."

Ice Plant.—Elgin Ice Factory, Elgin, Tex., F. K. Leggett, proprietor, Livingston, Tex., is receiving bids on 10-ton ice plant.

Irrigation Machinery.—H. S. Riggins, Kissimmee, Fla., wants gasoline engine, pump and irrigating machinery; engine from three to four horse-power; pump with capacity of 75 gallons per minute; would consider agency for irrigating equipment.

Lamp-posts.—Chas. Wheeler, Jr., City Clerk, Muskogee, Okla., will receive bids until October 18 for furnishing 50 gas-lamp posts f. o. b. Muskogee; designs of posts to accompany bids.

Lathe.—Citizens' Auto Co., Hobart, Okla., wants prices on small iron lathe.

Lathe.—Gulf Machine & Engineering Co., Water and Washington Sts., Tampa, Fla., wants second-hand screw-cutting lathe, swinging 18 inches, 30 feet 22 inches or 24 inches by 10 feet or 12 feet between centers; quick-change gears; (Hendly, American, Lodge & Shipley or other standard make). State weight, how long used, etc., f. o. b. Tampa.

Limekilns.—Shull Contracting Co., Beaufort, N. C., wants information on best method of constructing kilns for burning shells for making agricultural lime; also wants machinery to grind or pulverize oyster shells.

Locomotive.—W. B. Flowers, Greenville, Ala., wants 18 or 20-ton second-hand narrow-gauge engine (Shay preferred).

Locomotive.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and South Penn Square, Philadelphia, Pa., wants standard-gauge straight-connected saddle-tank locomotive, 30 tons on drivers.

Locomotive.—A. L. Sadler, Glen Rose & Walnut Springs Railroad Co., Glen Rose, Tex., wants bids on new or second-hand motor.

Machine Tools.—Gibbs Gas Engine Co., 803 Candler Bldg., Atlanta, Ga., wants 20-inch engine lathe; new or second-hand; also price on air hammers. Send catalogues to Gibbs Gas Engine Co., South Jacksonville, Fla.

Marble.—J. D. Johnson, 896 Dudley Ave., Texarkana, Ark., wants prices on marble, 120 linear feet, 6-inch base and 1x2 cap not gauged.

Mattress and Bedding Machinery.—Tom B. Burnett Company, Dallas, Tex., wants prices on felting machines, etc., for equipment of mattress and bedding factory.

Metal Ceiling.—F. H. Badger, McMinnville, Tenn., wants prices on metal ceiling.

Metal Columns.—F. H. Badger, McMinnville, Tenn., wants prices on metal columns.

Packing.—Geo. H. Alexander, Doe St., Birmingham, England, wants to represent American manufacturers of packing.

Paving.—Commissioners District of Columbia, Washington, D. C., will open bids October 15 for gutters, macadamized pavement and gutters on 13th street N. W.; forms of proposals may be obtained from office of chief clerk, Engineer Department, Room 427 District Building.

Paving.—A. L. Arnold, City Clerk, Ensley, Ala., will receive bids until October 19 for construction of artificial-stone sidewalks, combined curb and gutter, and grading of various streets; plans and specifications on file at office of V. E. Ohi, City Engineer; certified check for \$200 must accompany each bid; usual rights reserved.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will receive bids until October 20 for construction of improvements on Poydras street from south line of Commerce street to north line of Young street; bids to be received separately on bitulithic pavement on concrete foundation; bitulithic pavement on bitulithic foundation; rock asphalt on concrete base; concrete curb; concrete gut-

ter; combination concrete curb and gutter; vitrified brick; vitrified brick paving blocks; bidders shall bid according to specifications and shall separately bid as provided by specifications on cost of pavements, with maintenance bond for a term of years, and on cost of said pavement without maintenance bond; specifications on file at office of City Secretary; each bid must be accompanied by check for \$150; usual rights reserved.

Paving.—City of Perry, Okla., will receive sealed bids at office of F. F. Busch, City Clerk, until October 19 for construction of about 44,000 square yards brick paving on four-inch concrete foundation; about 12,000 linear feet curb and gutter, together with storm sewer for street draining; certified check for \$1000; plans and specifications on file at office of City Clerk.

Paving.—Sealed proposals in duplicate will be received by Robert Tait, City Treasurer, Montgomery, Ala., until October 18 for the paving of the roadway of Columbus street from the east side of North Court street to the west side of Perry street with brick or granite block, together with all necessary grading, curbing and storm sewers, according to plans on file in the office of the City Engineer; certified check in the amount of \$250 to accompany each bid; city reserves right to reject bids.

Paving.—Sealed proposals in duplicate will be received by Robert Tait, City Treasurer of Montgomery, Ala., until October 18 for paving of sidewalks with hexagon block or Schlumberger pavement, together with all necessary granite curbing, storm sewers and brick walls in connection; plans, profiles and specifications on file in the office of the City Engineer; certified check must accompany each bid in the amount as shown in the specifications on file in the office of the City Engineer; city reserves the right to reject any or all bids.

Paving.—Robert Tait, City Treasurer, Montgomery, Ala., will open bids October 18 for paving roadway of Park place with clay gravel, together with all necessary grading, granite headers, sewers; plans and specifications on file at office of City Engineer; certified check for \$100 must accompany each bid.

Peanut Oil.—Wm. A. Adler Company, 63 5th St., Milwaukee, Wis., wants addresses of manufacturers of peanut oil.

Plumbing.—See "Heating Plant."

Printing Machinery.—Index Printing Co., Atlanta, Ga., will open proposals December 1 for printing presses, perforators, etc.

Pulverizing Machinery.—See "Limekilns and Machinery."

Pump.—See "Irrigation Machinery."

Pump.—A. E. Holman, agent, Dyer Bldg., Augusta, Ga., wants deep-well pump with pump jack.

Pump.—Vacuum Ice Co., Baltimore, Md., wants to let contract for building triplex vapor pump with five-foot cylinders; from designs company will submit.

Rails.—Pennsylvania Equipment Co., 1209 West End Trust Bldg., Broad and South Penn Square, Philadelphia, Pa., wants 125 tons 66-pound relays for Georgia delivery and 40 to 50 tons 35-pound relays for Pennsylvania delivery.

Rails, etc.—A. L. Sudler, Glen Rose & Walnut Springs Railroad Co., Glen Rose, Tex., wants to correspond with manufacturers of and dealers in rails, ties, etc.

Rice-cleaning Machines.—Anahuac Wharf & Warehouse Co., F. W. Lutz, Anahuac, Tex., wants prices on rice-cleaning machines.

Refrigerators.—T. W. Brock, Jacksonville, N. C., wants catalogs and prices on glass and other refrigerators.

Road Construction.—Ohio County Commissioners, Wheeling, W. Va., opened bids October 14 for macadamizing National road as follows: Seventh mile, 250 yards; ninth mile, 100 yards; tenth mile, 100 yards; eleventh mile, 75 yards; twelfth mile, 75 yards. For further information address H. Bell, County Engineer, City Bank Bldg., Wheeling.

Roofing.—C. F. Hollberg, Senola, Ga., wants prices on roofing.

Roofing.—J. Schloss, 5234 Kensington Ave., St. Louis, Mo., wants composition roofing.

Safe, etc.—Farmers and Merchants' Bank of Robeson, Lumberton, N. C., wants prices on safe and bank fixtures.

Safe Machinery.—Conger Safe Co., 133 West 1st St., Oklahoma City, Okla., wants prices on machinery for building safes; bids opened about November 1.

Sash and Doors.—J. D. Johnson, 896 Dudley Ave., Texarkana, Ark., wants prices on sash and doors.

Saws.—See "Woodworking Machinery."

Scales.—Burke County Oil & Fertilizer Co.,

Waynesboro, Ga., in market for automatic scales.

Scales.—McEwen Lumber Co., Asheville, N. C., wants addresses of manufacturers of and dealers in computing scales for retail stores.

School Furnishings.—L. A. H. Koeth, Room 2 Masonic Temple Bldg., Wilmington, N. C., wants prices on desks and other school supplies.

Seating.—W. Carson Taylor, pastor Mt. Calvary Baptist Church, Richardson, Tex., wants prices on seats for \$8000 edifice.

Seawall.—Bids will be received at U. S. Engineer Office, Montgomery, Ala., until October 20 for construction of a seawall at Fort McRee, Fla.; information on application; H. B. Ferguson, Captain, Engineers.

Sewer Construction.—F. C. Wyse, City Engineer, Columbia, S. C., received bids October 11 for construction of 380 feet of eight-inch sewer on Gregg street; plans and specifications at office of City Engineer; certified check, \$25.

Sewer Construction.—Bids received at office of Charles E. Bolling, City Engineer, Richmond, Va., October 11 for construction of certain sewers; diameter of sewers from 2 to 4½ feet; about 4377 linear feet; brick or reinforced concrete. Plans, specifications, proposal forms and full information can be obtained at office of City Engineer.

Sewer Construction.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until October 18 for construction of lateral sewer in blocks 5, 24, 32, 52; plans and specifications on file at office of City Clerk; certified check 3 per cent. amount of bid must accompany each bid; usual rights reserved.

Sewer.—Robert Tait, City Treasurer, Montgomery, Ala., will receive bids until October 18 for construction of 900 feet of 3½-foot concrete storm sewer on Maury street from Hull street to Decatur street, and 200 feet south on Decatur street to connect with present sewers; plans and specifications on file at office of City Engineer; certified check, \$175.

Sewer.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until October 25 for construction of sanitary main sewer; plans and specifications on file at office of City Clerk; certified check 3 per cent. of bid must accompany each proposal; usual rights reserved.

Slate.—J. D. Johnson, 896 Dudley Ave., Texarkana, Ark., wants prices on 75 squares black 10x20 slate.

Snaking Machine.—A. G. Garbutt Lumber Co., Stateville, Ga., wants light single or double drum snaking machine; prompt shipment.

Steel Beams.—J. D. Johnson, 896 Dudley Ave., Texarkana, Ark., wants prices on 6000 to 7000 pounds of steel I beams.

Steel Beams.—F. H. Badger, McMinnville, Tenn., wants prices on I-beams.

Steel Castings, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until November 8 for steel castings, sheet steel, spur wheels, body bolsters, steel angles, etc.; blanks and general information relating to Circular No. 539 may be obtained at above office or office of assistant purchasing agents, 24 State street, New York; 55 National Realty Building, New Orleans; 1086 North Point street, San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill.; and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Steel Ceiling.—See "Building Materials."

Tank and Tower.—A. E. Holman, agent, Dyer Bldg., Augusta, Ga., wants 1500-gallon galvanized-iron tank with 40-foot pipe column sectional steel tower; tank to have non-freezing valve, cover and ladder; also wants two-horse-power gasoline engine and deep-well pump with pump jack.

Telephone Equipment.—East Carolina Electric & Realty Co., Snow Hill, N. C., E. L. Lynch, secretary, wants prices on telephone supplies and switchboards, line constructing material, etc.

Telephone Equipment.—A. L. King, Pulaski, Tenn., will probably want telephone equipment for about 800 phones.

Terra-cotta.—See "Building Materials."

Veneer.—Thos. D. Flinn, Box 37, Hillsboro, N. C., wants addresses of manufacturers of walnut and maple fine veneer.

Walnut Logs.—Thos. D. Flinn, Box 37, Hillsboro, N. C., wants to correspond with dealers in walnut logs.

Water-works.—Earl Hill, Town Clerk, Fort Gibson, Okla., received bids October 12 for complete installation of water-works system lately mentioned; plans and specifications on file at office of Town Clerk and of M. A. Earl & Co., engineers, Muskogee, Okla.; certified check for \$1500 must accompany each bid.

Water-works.—M. M. Thompson, Mayor, Benolt, Miss., will open bids November 2 for drilling artesian well; plans and specifications on file at office of Mayor; certified check \$300; usual rights reserved.

Well Drilling.—F. D. Keasler, Mayor, Sul-

phur Springs, Tex., will open bids in about 10 days for drilling artesian well; probable depth, 3500 feet.

Wire.—Hardin Patent Clotheshline Co., John R. McClurd, secretary, Shelby, N. C., wants prices on No. 14 galvanized wire.

Woodworking Machinery.—Graf-Davis-Collett Company, Salisbury, N. C., wants second-hand 10-foot veneer press.

Woodworking Machinery.—See "Snaking Machine."

Woodworking Machinery.—Frank Wright, Cave Springs, Ga., wants planer and matcher, power-feed rip saw and foot-treadle cut-off saw; all medium size.

## INDUSTRIAL NEWS OF INTEREST

### Hill Clutch Co. at Chicago.

The Hill Clutch Co., Cleveland, Ohio, manufacturer of power-transmission machinery, announces the appointment of G. W. Hoffman as sales engineer in charge of the Chicago office at No. 610 Marquette Building.

### For Oil-Burning Equipment.

The Irondale Steel Co., Fort Townsend, Wash., now building a steel plant, has just placed a contract with Tate, Jones & Co., Inc., Pittsburg, Pa., for the complete oil-burning equipment for two 20-ton open-hearth furnaces. The contract includes the burners, pumping systems, ladle driers, etc.

### Successor to Preacher & Holman.

Succeeding the firm of Preacher & Holman, architects and engineers, 403-404 Dyer Bldg., Augusta, Ga., by reason of the withdrawal of Mr. Holman, G. Lloyd Preacher will conduct the business as heretofore. All accounts due to or by the firm are payable to or will be paid by Mr. Preacher.

### Consulting, Contracting, Engineering, Etc.

For the purpose of buying and selling new and second-hand machinery, consulting, contracting and engineering, Herman L. Winterer has established an office at 326 Richmond street, Philadelphia, Pa. Mr. Winterer was associated for a number of years with Frank Toomey, Inc., 127-31 North 3d St., Philadelphia, Pa.

### Buyers and Manufacturers' Agent.

A change in the firm of Preacher & Holman, architects and engineers, of Augusta, Ga., has recently been made by the withdrawal of Mr. Holman, who has engaged as manufacturers' and buyers' agent and dealer in machinery, supplies and building material. He is located at 412 Dyer Bldg., Augusta, Ga.

### Orders for Bucyrus Piledrivers.

Among recent orders received by the Bucyrus Company of South Milwaukee, Wis., are two for piledrivers, one from the Chicago Great Western Railway and the other from the Rock Island & Pacific Railroad. In addition to piledrivers other products of the Bucyrus Company include dredges and dredging pumps, wrecking cranes, steam shovels, unloading plows, steel castings, etc.

### Large Sewer Pipe Plant Completed.

The plant of the Cannelton Sewer Pipe Co., Cannelton, Ind., has been completed and is now in operation. The most modern machinery and equipment was installed, and the company claims to have one of the finest plants of this kind in the country. The officers are John Meyer, president; Henry Boquet, vice-president; A. P. Clements, treasurer, and H. M. Clements, secretary and general manager.

### A Metallic Railroad Crosstie.

Parties desiring to manufacture a metallic railroad crosstie or to acquire patent rights will be interested in the announcement of the B. R. Canfield Railroad Crosstie Co. of Clearfield, Pa. The company wants to have its metallic railroad crosstie manufactured on a royalty or will sell its patent rights. Particulars will be furnished upon application.

### Belair Wants Factories.

Manufacturing plants are wanted at Belair, Md., and free sites are being offered for such enterprises. These sites are on the Maryland & Pennsylvania Railroad. Belair offers liberal freight rates, exemption from town taxation, electricity for lighting and power and local labor. It is 27 miles from Baltimore. The Board of Trade, H. S. O'Neill, chairman of committee on manufacturers, invites correspondence as to Belair's advantages.

### With Builders' Material Supply Co.

An interesting announcement refers to D. J. Calkins, formerly manager of sales of concrete reinforcing for the American System of Chicago, as purchasing an interest in the Builders' Material Supply Co. of Kansas City, Mo. The acquisition of Mr. Calkins will add strength to the Builders' Material Supply Co., which has extended its trade to Texas, Oklahoma, Kansas, Missouri and Nebraska.

### Will Offer General Machinery.

Harry Ellis, Jr., 308 Mutual Bldg., Richmond, Va., has established an office as manufacturers' agent for machinery of all kinds. He will offer steam engines, boilers, hoisting engines, mining and quarrying equipment, hydraulic and pumping machinery, machine tools and woodworking machinery, sawmills, etc. It is of interest to add that Mr. Ellis is well known to the machinery trade from his former connection with the Smith-Courtney Company, of which he was vice-president.

### H. F. Hoevel With Wiener Company.

H. F. Hoevel, M.E., has become a director of the Wiener Machinery Co. of New York, and has been elected vice-president and secretary. He is a graduate of the famous technical university of Charlottenburg, member of the German Society of Engineers and of the Society of German Steel and Iron Men. Mr. Hoevel has given special attention to the iron and steel production in its various branches, and (before coming to America) was connected with the Siemens-Schuckert Electric Works.

### C. O. Bartlett & Snow Orders.

Among recent orders secured by the C. O. Bartlett & Snow Company of Cleveland, Ohio, the following have been reported: From the Kelley Island Lime & Transport Co. of Cleveland, Ohio, one elevator of 1000 tons capacity of crushed stone per hour, and one elevator of 600 tons per hour; from the Winding Gulf Colliery Co., Cincinnati, Ohio, through F. C. Greene, mining engineer, one Greene self-dumping car haul and complete outfit, capacity 2500 tons of coal per eight hours; from William A. Clark, Butte, Mont., one ore drier, and from the American Smelters Securities Co., New York city, one ore drier for mines at Santa Barbara, Mexico.

### Offers Advantageous Factory Site.

Manufacturers who may need a site for a plant are invited to address the Falling Rock Cannel Coal Co. of Charleston, W. Va. This company offers a site located on the river front, where natural gas for fuel can be obtained at reasonable prices. The property is on the Elk River and Coal & Coke Railway, about 17 miles from Charleston. The Falling Rock company is operating six wells, which produce 15,000,000 feet of natural gas every day, and it is prepared to make advantageous contracts with people who contemplate establishing a new plant or who are considering a change of location in order to obtain facilities that will result in decreases in the cost of production.

### Tantalum and Tungsten Lamps.

The General Electric Co., Schenectady, N. Y., reports very gratifying sales of tantalum lamps. The sales of this lamp are more than double what they were a year ago, and the lamp appears to be sharing with the demand for high-efficiency lamps created by the introduction of tungsten lamps. The tantalum lamp as at present supplied is giving most excellent life service. Contrary to general belief, these lamps will give good commercial life on alternating current of 60 cycles or less. Their life on this frequency will average well above 600 hours. An interesting tantalum lamp order recently received called for 1900 lamps for the United States war vessels attending the Hudson-Fulton celebration in New York.



**Weber Gas Engines and Producers.**

Users of gas engines and gas producers will be interested in the announcement that the Sheffield Gas Power Co., Sheffield Station, Kansas City, Mo., has purchased the assets, factory and good-will of the Weber Gas Engine Co. and will continue to manufacture the entire line of Weber gas engines and gas producers. George M. Hawes is the president of the Sheffield Gas Power Co. and has been long interested in machinery and electrical work, devoting much time to designing gas engines and producers. Freeman Field, formerly of the Olds Gas Power Co., is the president and treasurer, and has had a number of years' experience both in the manufacturing and selling of gas engines. W. H. Spiller is the assistant manager of the company.

**Acheson Graphite Plant Enlargement**

Another substantial and commodious building is to be added to the Niagara Falls (Ont.) branch works of the International Acheson Graphite Co. It will be 50x105 feet, and contract has been awarded to W. S. Homan of Niagara Falls, Ont. The facilities afforded by this addition will make the Canadian works quite complete in its ability to care for a rapidly growing trade, made so by Canada's industrial growth. The building will contain a new grinding plant, in which the lubricating, electrotypes and other grades of powdered graphite will be prepared for market. It will also contain a stockroom for package goods, such as graphited greases, powders, etc., while a new shipping-room will make it most convenient for promptly filling orders.

**Closes Important Contract.**

Among important contracts recently closed by the Handlan-Buck Manufacturing Co. of St. Louis, Mo., is one for the complete equipment, except drop hammers, of a drop-forge plant for the Waterloo Drop Forge Co. of Waterloo, Iowa. John R. Morris, president and general manager, and F. B. Johnson, superintendent. The latter company will conduct a general drop-forge business, making a specialty of high-grade forgings for automobiles and kindred work, and manufacturing high-grade tools on which it has secured a number of patents. The equipment for its plant includes electric motors aggregating 135 horse-power, power presses, lathes, planers, millers, shapers, drills and miscellaneous tools, the total cost of which is approximately \$25,000. The machine shops and forgeroom will be lighted with Stave flaming arc lamps, for which the Handlan-Buck Manufacturing Co. is the Western agent.

**Mechanical Installations, Etc.**

Mechanical and engineering work for which Samuel T. Williams, mechanical and contracting engineer, 223 North Calvert St., Baltimore, Md., has recently received contracts includes several important orders for installations and repairs. These embrace designs for a large trench-cutting machine to cut trenches through asphalt pavements and concrete base; installing power plant for the Westport Paving Brick Co. at Westport, Baltimore, Md., and rebuilding 150-horse-power Atlas engine and refitting two 100-horse-power boilers, together with the installation of 200-horse-power Helme water-tube boilers, one 350-horse-power Watts-Campbell Corliss engine, heaters, pumps, hot-air system, etc., making a total of 600 horse-power in the plant. Mr. Williams is also preparing plans for other plants, and in addition to the class of work mentioned he designs special machinery, remodels factories and power plants and guarantees reduced fuel consumption and increased output.

**Increasing Its Facilities.**

Because of its increasing trade the Greensboro Boiler & Machine Co. of Greensboro, N. C., has found it necessary to add considerably to its facilities. It has erected an additional building 60x160 feet, which it is intended to supplement with a wing of 24 feet. This building has been equipped with punches, shears, bending rolls and a traveling monorail crane for handling heavy machinery. The iron entering into its construction was assembled and erected by the company, the heavy supports being set in concrete and having floors of great strength. Among the products of the company are towers, tanks, stacks, ironworking machinery, etc. It makes a specialty of manufacturing slide-valve engines up to 60 horse-power and Corliss engines from 60 to 100 horse-power. It also equips machine shops with ironworking tools of various kinds and carries in stock holsting-block tools and new and second-hand machinery. The company desires agents in Georgia, Florida and Texas.

**Revolving Portable Elevators.**

An idea of the extensive use to which revolving portable elevators are being put is conveyed in information from the New York Revolving Portable Elevator Co., main office and factory at 450-454 Princeton Ave., Jersey City, N. J. This company manufactures revolving portable elevators designed for factories, warehouses, mills, etc., and has booked orders for machines which crowd the capacity of its plant. Among important users are the United States Government elevators are the United States Government Printing Office and Navy-yard; Joseph Bancroft & Sons Company, Wilmington, Del.; Burton Bros., Broadway, New York; The Fairbanks Company, Boston, Mass.; Lone Star Canal Co., Anahuac, Tex.; Smith-Courtney Company, Richmond, Va.; Fulton Bag & Cotton Co., Tallahassee, Ala.; A. G. Hyde & Co. (three machines), New York city, and numerous others. The company is receiving inquiries concerning its machines from Mexico, London, Paris, Russia, China, New Zealand, New South Wales, Buenos Ayres and other countries. It has recently perfected and will soon put on the market a motor-driven machine of the same type which it is at present manufacturing.

**Deluged With Orders.**

Notwithstanding the business depression which affected so many manufacturers during the past two years, there are numerous companies whose trade, rather than decreasing has increased so extensively during this period that it has been necessary to employ additional force at their plants to meet the demands. Among the companies who have found it necessary to employ a night force in addition to the regular day force in order to keep pace with their contracts is the Taplin-Rice-Clerkin Company of Akron, Ohio. This company manufactures clay and rubber making machinery, stoves, ranges, furnaces, etc., and has recently received a number of important contracts. These include rubber-making machinery and equipment for the Federal Rubber Co., Milwaukee, Wis.; Revere Rubber Co., Chelsea, Mass.; Republic Rubber Works, Youngstown, Ohio; Diamond Rubber Co., Akron, Ohio, and the B. F. Goodrich Company, Akron, Ohio. Important orders have also been received for clay-working machinery from the Pomona Terra-Cotta Co., Pomona, N. C.; Streater Clay Manufacturing Co., Streater, Ill., and the Washington Brick, Lime & Sewer Pipe Co., Spokane, Wash. The stove and furnace departments of the company are crowded with orders.

**Air Washer and Humidifier.**

While the Carrier air washer and humidifying apparatus is designed for numerous uses, with one exception it has never been built for conditioning tobacco. This exception refers to a recent installation of the equipment at the Thomas Hodge tobacco factory at Henderson, Ky. The equipment in this instance consists of one standard 100-inch steel-plate full-housing up-blast fan; standard No. 53-D air washer and humidifier, composed of spray chamber, eliminators, settling tank, centrifugal pump for circulating the water, pipe connecting pump and washer, equipped with automatic humidity controlling system, and a hot-blast heater. The purpose of the plant is to put 13 per cent. of moisture rapidly into tobacco that has previously been dry or nearly so. Through the action of the automatic control, when this percentage of moisture has been absorbed the apparatus is immediately shut off, allowing no excess to be absorbed. The equipment was manufactured by the Carrier Air Conditioning Co. (Buffalo Forge Co.), Buffalo, N. Y., and is guaranteed, when installed and operated in accordance with the company's instructions, to be capable of automatically moistening 30,000 pounds of tobacco to a regain of 14 per cent. in from 10 to 12 hours.

**The Southern Gravel & Material Co.**

By acquiring certain interests in the Southern Gravel & Material Co., J. M. Dresser, 1027 Maison Blanche Bldg., New Orleans, La., and George W. Neal, Brookhaven, Miss., have been elected president and general manager, respectively, of the company. This company produces five different sizes of gravel, running from one-eighth of an inch to three inches in diameter, which it mixes in any proportion of sand and gravel required. It furnished the concrete mixture for the Audubon Building, in New Orleans, in which all the iron work was encased in concrete, the molds in some instances being only three-quarters of an inch from the girders. The company has made arrangements with the Illinois Central Railroad to ship it a trainload of washed gravel and two trainloads of bank-run gravel

per day. It is also delivering to the Mississippi Central Railroad a trainload of bank-run gravel per day, besides shipping to New Orleans, Meridian, Greenwood, Yazoo City and Jackson. By reason of the adaptability of its material to road construction, the company proposes to inaugurate a good-roads department, using its bank-run gravel for capping the foundation, on top of which it will roll two or three inches of its washed gravel, using the largest size first and finishing with torpedo sand mixed with the washing from the plant. The company's main office is at 1027 Maison Blanche Bldg., New Orleans, La., and its plant is at Brookhaven, Miss.

**TRADE LITERATURE.****Sewer Pipe, Paving Brick, Etc.**

A convenient pamphlet and price-list F. illustrating and describing the products of the American Sewer Pipe Co., general offices, Akron, Ohio, is being circulated. The company's products include sewer pipe, paving brick, culvert pipe, conduits, etc.

**Overhead Carrying Devices.**

Much valuable information is contained in catalogue No. 77 of the New Jersey Foundry & Machine Co., 90 West St., corner Cedar St., New York, relating to overhead carrying devices, including tracking, trolleys, hoists, cranes, buckets, cars, etc. The catalogue is well bound and contains a number of interesting illustrations with descriptive data.

**Morrill Hardware Specialties.**

Dealers in and users of hardware specialties will be interested in a wholesale catalogue which is being circulated by Charles Morrill, manufacturer, 277 Broadway, New York. This catalogue describes and illustrates a number of hardware specialties, including nail-pullers, sawsets, bench stops, punches, lead seal presses, liquid-soap containers, spike-pullers, etc.

**A Catalogue of Sturtevant Products.**

Condensed catalogue No. 165, illustrative and descriptive of the Sturtevant products, is ready for distribution. It is issued by the B. F. Sturtevant Company, Hyde, Mass., and embraces the company's complete line of fans, blowers, dust collecting and conveying systems, fuel economizers, engines, motors, turbines, etc. It also contains tables of principal dimensions and other useful information.

**Spargo Wire Cloth.**

A booklet which should be of interest and value to users and dealers in wire cloth has been issued by the Spargo Wire Cloth Co. of Rome, N. Y. It is of convenient size for the pocket, and contains illustrations of various kinds of wire cloth, together with specifications and prices. The Spargo Wire Cloth Co. manufactures brass, copper and bronze wire cloth of various weaves, bronze and galvanized window-screen cloth, etc.

**The Sullivan Air Compressors.**

An idea of the scope of the Sullivan Machinery Co.'s Railway Exchange, Chicago, Ill., as a manufacturer of air compressors is conveyed in a booklet which that company is circulating. The publication is illustrated, but by reason of its small size, descriptive data is restricted to a mention of the characteristic features of the several types. Correspondence regarding compressors and the use of compressed-air is invited by the company.

**The Brinly-Agricultural Implements.**

As the agricultural population increases throughout the country and prospects of the industry become brighter there is also an increasing demand for improved agricultural implements. To meet these conditions, although the Brinly plow has been on the market for 70 years, constant improvements make them modern in all features. These plows are manufactured by the Brinly-Hardy Company of Louisville, Ky., and are described and illustrated, with other agricultural implements which the company manufactures, in its catalogue No. 77, now being distributed.

**Publications Worth Having.**

The value and interest which may be given to publications primarily designed to influence trade is exemplified in a series of bulletins entitled "Plymouth Products," issued by the Plymouth Cordage Co., Plymouth, Mass. These bulletins are interesting in their treatment of various fibers, the history of ropemaking, etc., and many requests for them have been received from schools and public libraries, as well as from technical and general publications. The company has issued eight bulletins, which can be fur-

nished, while the supply lasts, in a substantial loose-leaf binder, forming a book of about 100 pages.

**About a New Wrench.**

Without springs, ratchets or thumb-screws, and embodying the simple wedge principle, the "Arpeco" wrench, through this application, eliminates many objectionable features often found in tools of this character. The simple raising or lowering of the yoke or sleeve by the thumb of the hand holding the wrench gives it an instantaneous grip. The wrench is especially adapted for use on bolts of automobiles and carriages, and combines unusual strength and holding power with light weight. It is manufactured by Rogers, Printz & Co., Warren, Pa., and is described and illustrated in a pamphlet which the company is distributing.

**"A B C" and "Sirocco" Apparatus.**

For the purpose of condensing 12 large sectional catalogues relating to its various products the American Blower Co., general offices at Detroit, Mich., has issued catalogue No. 259-E for foreign and American circulation. By the recent consolidation of this company with the Sirocco Engineering Co. it controls all rights under the patents issued to S. C. Davidson of Belfast, Ireland, covering broadly the principle and construction of the well-known "Sirocco" centrifugal fan or blower in the United States and its possessions. The catalogue refers briefly to this equipment as well as to the company's other products, including its "A B C" vertical enclosed self-oiling steam engines, centrifugal fans and blowers, fan systems, heating, ventilating and mechanical draft apparatus and special drying systems.

**Literary Notes.**

Railroad Freight Rates in Relation to the Industry and Commerce of the United States. By Logan G. McPherson. Publishers, Henry Holt & Co., New York. Price \$2.25.

About 20 years ago Arthur P. Gorman, then a United States Senator from Maryland, suggested in private conversation that the fundamental problems of production in this country had been solved and that the great problem before the country was that of distribution. Something of that idea must have been at the back of the head of the author of this volume in planning his study of freight rates than their effect upon the industry and commerce of the United States. In preparation for his work he made a first-hand survey, covering the entire country, and obtained a mass of information directly from the traffic officials of the railroad, the traffic experts of great commercial and industrial corporations, and of shippers' organizations in various cities, and from individual shippers. Results of investigations are embodied in separate chapters on the channels of traffic, the preparation of foodstuffs, the distribution of foodstuffs, the distribution of raw material, transportation charge and prices, regional rate structures, commodity rate structures, import and export traffic, early tariffs and classifications, beginning of through service, rate wars and traffic agreements, secondary freight services, developments of the freight service, freight traffic department, transportation charge, public sentiment and legislation up to 1887, the interstate commerce law, further developments in public sentiment and legislation, the Hepburn bill, influence of the interstate commerce commission toward uniform procedure, traffic experts, commerce of the cities, a comparison of the railroads with the agricultural and manufacturing industries, and the progressive achievement of the railroads.

Efficiency as a Basis for Operation and Wages. By Harrington Emerson. Publisher, the Engineering Magazine, New York.

In nine months of 1908 and 1909 appeared in the *Engineering Magazine* a series of articles by Mr. Emerson dealing with the process of directing the great

[Continued on Page 70d.]

# FIFTEENTH ANNUAL REPORT OF THE SOUTHERN RAILWAY COMPANY

Year Ended June 30, 1909.

Washington, D. C., October 8, 1909.

To the Stockholders of the Southern Railway Co.:

The Board of Directors submit the following report of the affairs of the Company for the year ended June 30, 1909:

## INCOME STATEMENT.

	1909.	1908.	Inc. or Dec.
Miles of road operated, average.....	7,170.36	7,489.13	Dec. 318.77
Gross operating revenues.....	\$52,188,106 64	\$52,941,716 51	Dec. \$753,609 87
Total operating expenses.....	35,568,980 60	39,854,722 13	Dec. 4,285,741 53
Net operating revenue.....	\$16,619,126 04	\$13,086,994 38	Inc. \$3,532,131 66
Outside operations.....	136,963 39	21,262 65	Inc. 115,700 74
Net revenue.....	\$16,756,089 43	\$13,108,257 03	Inc. \$3,647,832 40
Taxes accrued.....	1,916,701 65	2,927,967 35	Dec. 1,111,267 90
Operating income.....	\$14,839,387 78	\$11,080,289 68	Inc. \$3,759,098 10
Other income.....	2,898,311 70	2,766,676 86	Inc. 131,634 84
Total gross income.....	\$17,737,699 48	\$13,846,966 54	Inc. \$3,890,732 94
Deductions from total gross income.....	\$3,060,583 21	\$3,134,341 81	Dec. \$73,758 60
Interest on funded debt and equipment obligations.....	11,067,739 85	10,310,774 80	Inc. 756,966 05
Total deductions.....	\$14,148,314 06	\$13,445,116 61	Inc. \$703,197 45
Balance of income over charges.....	\$3,589,385 42	\$401,849 93	Inc. \$3,187,535 49
Additions and betterments.....	78,285 18	122,707 37	Dec. 44,422 19
Balance carried to credit of profit and loss.....	\$3,511,100 24	\$279,142 56	Inc. \$3,231,957 68

A statement of the accounts of the Company, in the usual detail, will be found in the tables hereto annexed.

The accounts have been examined, as usual, by Certified Public Accountants, Messrs. Patterson, Teele & Dennis, and their certificate is made a part of this report.

## THE OPERATING RESULTS.

The return of business from the low level of the panic conditions of 1907 was slow during the past year, but it was substantial.

While the operating revenues, as stated in the income account, show an apparent decrease of \$753,609.87, as compared with the year ended June 30, 1908, this is due to the fact that the revenues from operation of the Tennessee Central Railroad and the Southern Railway in Mississippi were included last year, and both these properties have been separately operated during this year. Comparing like with like, the results of operation show increased operating revenues amounting to \$606,766.46 for this fiscal year. The gross operating revenue per mile of road was \$7,278.31 in 1909, or just about what it was in 1906, as compared with \$7,228 in 1908 and \$7,507.49 in 1907, when the volume of the Company's traffic was greatest. A just estimate of the improving condition of the Company's business during this year can better be obtained by comparing the operating revenues for the first six months of the calendar years 1908 and 1909, which show an increase of \$2,326,107.20 for this year.

Although the volume of business done was thus not unsatisfactory, the results of operation illustrated by the substantial increase of \$3,786,893.56 in operating income were obtained, it will be evident, by control of operating expenses.

The study and practice of operating efficiency, which were initiated in the winter and spring of 1908, as described in the last Annual Report, were vigorously pursued during the year now under review, and with gratifying results. It will be noted that the operating ratio, excluding taxes, was reduced from 74.79 in 1908 to 68.16 in 1909; or, to state the result differently, while operating revenues increased 1.18 per cent., operating expenses decreased 7.80 per cent. That the chief element in this result is efficient operating methods, as illustrated by the fact that of the total decrease in operating expenses 55.70 per cent. was in transportation expenses, continues to be a ground of encouragement to the management.

What this progress is can perhaps best be realized by a few statistics dealing comparatively with some operating units, viz.:

	1908.	1909.
Total transportation costs per revenue train mile, in cents.....	62.66	60.75
Road engine costs per road engine mile, excluding repairs, in cents....	22.49	20.41
Train expenses per revenue train mile, in cents.....	9.93	9.21
Loaded cars per revenue freight train mile.....	13.46	15.19
Tons handled per revenue freight train mile.....	232.33	266.40

Particular attention has been paid during the past year to removing the causes for loss and damage claims, which, with all railroads, are so heavy a tax on net revenue. That success in work of this kind means as much to the security holders as the establishment on the line of new traffic-producing industries of the largest capacity is evidenced by the fact that the disbursements for loss and damage claims in 1909 were at least \$800,000 less than in 1908, and in neither year were there any extraordinary losses. The saving was in the sum of small losses due to greater care in handling freight and more efficient service.

It will be noted that the charges to expenses in the maintenance accounts show material reductions as compared with 1908, but the upkeep of the property has not been neglected. The figures for 1908 contain comparatively large charges to maintenance accounts during the last six months of the calendar year 1907, before the campaign of retrenchment was begun, while the expenses for maintenance during the entire fiscal year just ended have been controlled through monthly appropriations under the policy which was inaugurated during the first six months of the calendar year 1908. This policy has been one of acute and careful scrutiny of all expenditures for operating account. Money has been authorized to be spent where it was needed, and not necessarily where it would have been a gratification to spend it. It has taken courage to

maintain this policy, but it is confidently believed that the result has justified it. While some maintenance has been postponed until increased revenues shall warrant the expenditure, this has been only in respect of those parts of the property where deliberate and expert judgment justified postponement upon the real necessities of the case. The general condition of the physical property at the close of the fiscal year was good, both actually and comparatively, and the plant was at all times during the year amply able to carry the load which it had to bear. With the expectation of increased business, and consequently heavier traffic, the appropriations for maintenance have been materially increased, and so at all times the policy of the management has been one of elastic adjustment to the actual requirements of the property, but with unremitting watchfulness of the factors of safety and efficiency.

Attention is invited to the report of the Vice-President and General Manager, hereto attached, for details of the results of operation.

## THE CAPITAL ACCOUNT.

What may be considered the immediate financial problem of the Company has been the absorption of the several issues of short-term notes, which were made to provide for the extraordinary capital obligations assumed during the period of great prosperity, when, as explained in previous reports, the problem of management seemed to be entirely one of judicious expansion. During this year the \$16,000,000 of Collateral Trust Five Per Cent. Bonds which were issued in 1904 matured, and were redeemed by the sale of Development and General Mortgage Bonds which had been reserved for that purpose under the general plan of the mortgage. Later in the year it became possible to sell more of such bonds on fair terms, and advantage of the market was taken to provide for the retirement also of the \$15,000,000 Three-Year Convertible Six Per Cent. Notes, which were not due until 1911. The proceeds of the Development Bonds which were pledged as security for the Six Per Cent. Notes were accordingly applied to their redemption and the notes were called, a part of them being paid off on May 1, 1909, and the remainder will be paid off on November 1, 1909. In this way \$31,000,000 of temporary obligations of the Company were permanently funded, and while the funded debt was increased, the fixed charges of the Company will be decreased \$96,680 per annum by these operations. A further reduction in fixed charges has been effected by the acquisition of a number of underlying Six Per Cent. Bonds against the issue of First Consolidated Mortgage Five Per Cent. Bonds sold at a premium. In this connection, the effect upon the capital account and the fixed charges of the redemption of equipment obligations to the extent of \$3,090,103.73 during the year is important.

## CONSTRUCTION.

During the year much of the construction work which was suspended in the summer of 1907 was resumed, and substantial progress has been made towards the completion of some very desirable facilities. The principal work has been in the provision of additional double track at the points where the capacity of existing single track has been overtaxed, as was explained in detail in the Annual Report of 1907.

Of this work the revision of grade and double-tracking of the main line south from the terminal yard at Monroe, Virginia, across the James River, through the city of Lynchburg and thence across the Staunton River to Sycamore, Virginia, a total distance of 38.14 miles, shortening the old line 2.16 miles, is perhaps the most important. A portion of this new double track from Durmid to Sycamore, 30 miles, has been in operation since April 30, 1909; the remainder, involving the construction of a notable viaduct over the James River and a tunnel 1300 feet in length under the city of Lynchburg, is heavier work, but should be available for operation in the spring of 1910.

The throat through which the Knoxville and Atlanta lines, which converge at Ooltewah Junction, Tennessee, reach the city of Chattanooga, is another piece of line where double track has long been needed. The work on this 14 miles was resumed during the year, and is being pushed to completion.

Other pieces of double track out of terminals are also under construction, viz.: 2.63 miles north out of Greensboro, N. C., and 4.4 miles west out of Asheville, N. C.

Since the close of the fiscal year contracts have been let for the construction of second track on the main line in North Carolina, from Spencer south to Glass, 18.70 miles, and from Charlotte north to Harrisburg, 13.60 miles, and these works being comparatively light should be completed by January 1, 1910.

When the expected increase in the volume of traffic is realized with the return of business prosperity, the Company will have in all 323.57 miles of double track at its "pinch" points, and should be able to handle its business without congestion or disturbance, largely by reason of the relief so afforded.

During the year portions of the projected low-grade Little Tennessee River line, connecting Knoxville with the Carolinas, upon which work was begun several years ago, were also completed and put in operation, viz.: 25.30 miles from Maryville to Chilhowee, Tenn., which was constructed in the name of the Tennessee & Carolina Southern Railway Company, and 13.90 miles from Bushnell to Fontana, N. C., which was constructed in the name of the Carolina & Tennessee Southern Railway Company. These lines are operated for local service, but it is not proposed immediately to push the work through. The present construction policy of the Company is to apply its capital resources to enlarging the capacity and facilities of its existing lines, where a heavy traffic is assured, rather than to exploit new territory or hazard new lines.

## CHARACTERISTICS OF FREIGHT TRAFFIC.

Freight traffic handled during the year, in the order of its tonnage volume, may be grouped in the following manner:

Commodity.	Tons.	Per cent.
Fuel—Coal, Coke and Charcoal.....	7,190,263	32.49
Forest Products—Lumber, etc.....	3,818,411	17.25
Stone, Cement, Brick, Sand and like materials.....	2,075,270	9.38
Merchandise.....	1,980,661	8.95
Manufactures and Miscellaneous, not otherwise classified.....	1,768,374	7.98
Cotton and all its products.....	1,571,339	7.19
Grain, Grain Products and Hay.....	1,100,413	4.97
Fertilizer.....	964,241	4.36
Iron, Steel and Machinery.....	823,586	3.73
Ores and Clays.....	423,418	1.91
Perishables.....	310,190	1.40
Petroleum.....	107,223	.48
Total.....	22,133,389	100.00

More than 70 per cent. of this tonnage was produced in the South, in the main on this Company's rails. No better evidence could be had of the independent position of this property.

The tonnage increase per mile of road during 10 years has been 42 per cent., marking the development of productive energy and of territorial resources.

Nearly one-third of the traffic was coal, originating chiefly on the Company's lines. Another third consisted of manufactured articles, ready for immediate use, a substantial share of which were manufactured in the South from Southern raw materials.

The tonnage of lumber and logs embraced a great variety, including mahogany, Spanish cedar and shittim wood. Much of this tonnage found distribution in numerous woodworking establishments on the Company's lines, and was converted into furniture, store fixtures and all the various kinds of house-furnishing materials.

The year was a dull one for iron and steel. The tonnage in pig and blooms was 100,528 tons less than 10 years previous; that of iron and steel manufactures 188,951



tons greater. Sixty per cent. of the pig metal and all the billets produced in the South are manufactured in that section.

The South is no longer a mere producer of raw materials.

Serving most of the cotton-producing States directly, and the remainder of them indirectly, with its lines touching five of the chief ports through which cotton passes to both foreign and domestic markets; serving directly a substantial majority of the spinning enterprises of the South, this railway is naturally a large (probably the largest) carrier of the South's chief agricultural product—cotton. The Company handled during the year 636,207 tons, or more than 2,500,000 bales, of the fleecy staple, including the movement to various primary markets in the South and the subsequent movement from these markets to points of consumption. Yet this important traffic constituted less than 3 per cent. of the total tonnage for the year.

It is a fact, not generally known, that for each pound of lint cotton produced there are approximately two pounds of seed, the manufacture of which has become a Southern industry of great magnitude, affording a substantial freight tonnage.

The textile industry in the South took 2,553,873 bales, or over 18 per cent., of the last cotton crop—to be spun and wove in Southern factories. This Company handled during the year 61 per cent. of the manufactured product.

Therefore, to fully appreciate the importance to the Company of cotton, account should be taken also of its kindred tonnage, as indicated by the following table:

Products.	Tons.
Cotton.....	636,207
Cottonseed.....	244,563
Cottonseed hulls, meal and cake.....	238,244
Cottonseed oil.....	122,511
Cotton bagging and ties.....	29,627
Cotton factory products.....	329,814
<b>Total.....</b>	<b>1,600,966</b>

or 7.23 per cent. of the total tonnage.

It is worthy of note that the tonnage of merchandise traffic exceeds the tonnage of cotton and its entire products, and that the combined tonnage of merchandise, manufactures and miscellaneous articles, furnishing practically 17 per cent. of the total tonnage, was exceeded only by tonnage of fuel and forest products. These facts are more interesting when it is known that the merchandise, manufactures and miscellaneous articles produce the highest revenue results and are subject to the keenest competition.

## INDUSTRIAL PROGRESS.

The industrial South has not been stagnant, despite the business depression. On the lines of this Company there were completed during the year 453 new manufacturing plants, classified as follows:

Brick works.....	40
Cottonseed-oil mills.....	11
Fertilizer works.....	7
Flour and feed mills.....	25
Furniture factories.....	28
Iron industries.....	23
Lumber mills.....	67
Stone quarries, coal and other mines.....	36
Tanneries.....	1
Textile mills.....	48
Woodworking plants.....	18
Miscellaneous plants.....	159
<b>Total.....</b>	<b>453</b>

The number of industrial plants under construction at the close of the year was 66, and the number of additions made to existing plants during the year aggregates 123.

There are now at least 10,000 manufacturing plants on the lines of this Company. It is a very few years since there were not that many in the entire South.

## THE GREATER EFFICIENCY OF LABOR.

More than conventional acknowledgments are due by the Board and the security holders to the officers and employees of the Company for their work during the past year. Not only have they been faithful in the discharge of their assigned duties, but they have been infused with a new spirit of enthusiasm in the interests of the Company, which are indeed their own interests. Co-operation between departments has been marked, while never before has there been such evidence of the loyalty of employees in all ranks of the service. This is the fruit of that greater efficiency of labor upon which there cannot be laid too serious stress in estimating the results already obtained and the prospects for the future.

Respectfully submitted, by order of the Board,

W. W. FINLEY,  
President.

TABLE 1.

COMPARATIVE BALANCE SHEET, JUNE 30, 1909, AND JUNE 30, 1908.

ASSETS.		LIABILITIES.	
June 30, 1908.	June 30, 1909.	June 30, 1908.	June 30, 1909.
\$293,856,032 96	\$293,856,032 96	\$120,000,000 00	\$120,000,000 00
Cost of Road:		Common.....	60,000,000 00
Cost of Southern Railway Properties to June 30, 1908.....	1,797,973 89	Preferred.....	60,000,000 00
Additions during the year (see page 24 of pamphlet report).....	236,654,096 85	<b>Total Capital Stock.....</b>	<b>\$120,000,000 00</b>
<b>Total Cost of Road.....</b>	<b>\$296,654,096 85</b>	Southern Railway Mobile & Ohio Stock Trust Certificates.....	5,670,290 00
Cost of Equipment:		Funded Debt (see Table 5, page 32 of pamphlet report).....	234,002,409 00
Cost of Southern Railway Equipment to June 30, 1908.....	2,218,012 51	Outstanding Securities on Leasehold Estates. (Per contra).....	32,349,000 00
Cost of Equipment charged to Capital during the year (see page 25 of pamphlet report).....	31,855,613 13	Equipment Obligations (per contra):	
<b>Total Cost of Equipment.....</b>	<b>2,249,824 64</b>	Equipment Trust, Series A.....	\$229,000 00
Leasehold Estates:		Equipment Trust, Series B.....	354,000 00
Road.....	\$30,808,607 31	Equipment Trust, Series C.....	1,617,000 00
Equipment.....	1,540,392 69	Equipment Trust, Series D.....	35,550 00
<b>Total Leasehold Estates. (Per contra).....</b>	<b>32,349,000 00</b>	Equipment Trust, Series E.....	125,400 00
Southern Railway Trust Equipment. (Per contra).....	14,475,163 07	Equipment Trust, Series F.....	2,700,000 00
<b>Total Cost of Road, Equipment and Leasehold Estates.....</b>	<b>\$374,333,783 05</b>	Equipment Trust, Series G.....	1,823,000 00
Cost of Securities Pledged or Held for Special Purposes:		Equipment Trust, Series H.....	2,200,000 00
Pledged under First Consolidated Mortgage (see Table 7, page 34 of pamphlet report).....	\$13,306,634 97	Equipment Trust, Series I.....	1,823,000 00
Pledged under Development and General Mortgage (see Table 8, page 35 of pamphlet report).....	20,296,872 21	Equipment Trust, Series J.....	2,200,000 00
Pledged or deposited under various indentures.....	23,313,703 20	Equipment Trust, Series K.....	1,823,000 00
Unpledged, held for Special Purposes.....	10,774,597 05	Equipment Trust, Series L.....	2,200,000 00
<b>Special Deposit with Financial Agent to redeem on November 1, 1909, Convertible Six Per Cent. Notes, due May 1, 1911.....</b>	<b>67,691,907 43</b>	Miscellaneous Equipment Contracts.....	394,213 07
<b>Cost of Road, Equipment and Securities Held as Stated.....</b>	<b>\$453,130,680 48</b>	Unmatured Balance of Purchase Price, Northeastern Railroad of Georgia.....	14,475,163 07
Material and Supplies on Hand (see Table 22, page 51 of pamphlet report).....	\$3,985,255 50	Unmatured Balance on Hartwell (Ind.) Branch.....	107,000 00
Rail and Fixtures Leased.....	380,212 41	<b>Total Capital, Funded and Lien Liabilities.....</b>	<b>\$466,609,876 78</b>
<b>Total Capital Assets.....</b>	<b>\$457,506,158 39</b>	Reserves:	
Miscellaneous Securities Owned—in Treasury Unpledged.....	4,015,569 88	For Maintenance of Way and Structures.....	\$161,783 96
Bills Receivable—deferred, but secured.....	586,479 68	For Maintenance of Equipment.....	1,890,672 45
Advances to Subsidiary Companies.....	925,622 31	Miscellaneous.....	78,788 65
Income Accrued—not due.....	473,572 80	<b>Interest and Rentals Accrued—not due.....</b>	<b>2,131,295 66</b>
Insurance Paid—not accrued.....	712 65	Taxes Accrued—not due.....	1,888,435 89
Insurance Fund. (Per contra).....	620,659 19	Unmatured Obligations for New Steel Rail, payable on and after July 1, 1910.....	752,113 83
Sinking Funds—Uninvested Balance in hands of Trustee.....	590 00	Insurance Fund. (Per contra).....	620,659 19
Net Discount on Securities Sold—to be charged off prior to maturity of the security.....	7,797,910 65	Sundry Accounts.....	265,472 15
Sundry Accounts.....	1,534,968 75	<b>Current Liabilities:</b>	
<b>Current Assets:</b>		Interest and Rentals Due and Unpaid, including amount due July 1.....	\$2,751,421 05
Cash in hands of Treasurer, Banks and Financial Agents.....	\$11,124,664 97	Bills Payable.....	982,396 97
Cash in Transit from Agencies.....	1,117,014 74	Freight Claim Authorities Outstanding.....	100,955 25
Due from United States Postoffice Department.....	125,307 26	Unpaid Wages, Including June Payrolls.....	1,825,732 61
Due from Agents and Conductors.....	515,961 44	Audited Vouchers.....	2,636,019 34
Due from Other Transportation Companies.....	3,093,271 11	Due Other Transportation Companies.....	852,098 93
Due from Individuals and Companies.....	966,652 53	Due Individuals and Companies.....	288,914 65
Bills Receivable—current.....	653,064 56	Material and Supplies in Transit—not vouchered.....	319,284 15
Miscellaneous Current Securities.....	824,300 00	Undetermined Liabilities Awaiting Adjustment.....	1,743,986 71
<b>Total Current Assets.....</b>	<b>\$18,350,236 58</b>	<b>Profit and Loss (see Table 4, page 31 of pamphlet report).....</b>	<b>6,962,007 81</b>
<b>Total Liabilities.....</b>	<b>\$491,821,390 88</b>		

## FINANCIAL CHANGES DURING THE YEAR.

## Cost of Road:

The cost of road on June 30, 1909, was.....	\$295,654,006 85
The cost of road on June 30, 1908, was.....	293,856,032 96

Net increase..... \$1,797,973 89

## The Additions during the year were as follows:

Real Estate purchased at various points.....	\$15,944 07
Less:	
Real Estate sold.....	13,307 62
Jasper-French-Lick Line.....	1,736 45
Okolona-Big Creek Line in Mississippi.....	1,666 39
Stevenson, Ala., Extension: Stevenson, Ala., to Chattanooga, Tenn.....	1,061 00
	283,178 86
Second Main Track and Revision of Lines on:	
Asheville Division.....	Cr. \$3,421 24
Atlanta Division.....	1,496 63
Birmingham Division.....	9,048 34
Danville Division.....	640,690 49
Knoxville Division.....	234,177 71
Washington Division.....	300 00
	882,291 93

## Miscellaneous New Branches and Spurs on:

Birmingham Division.....	\$651 70
Charleston Division.....	4,166 76
Charlotte Division.....	593 46
Columbia Division.....	203 44
Coster Division.....	1,278 20
Danville Division.....	24,444 41
Knoxville Division.....	5,964 39
Mobile Division.....	6,890 62
St. Louis Division.....	Cr. 9,696 09
	31,486 89

## Additional Yards, Extensions and Yard Improvements at:

Lynchburg, Va.....	\$1,882 10
Montview, Va.....	9,467 57
Asheville, N. C.....	3,302 99
Canton, N. C.....	393 41
Charlotte, N. C.....	78,476 14
Winston-Salem, N. C.....	Cr. 861 50
Hamburg, S. C.....	23,322 59
Inman Yard, near Atlanta, Ga.....	1,762 49
Birmingham, Ala.....	11,298 40
Mobile, Ala.....	3,197 43
North Birmingham, Ala.....	1,184 71
Coster, Tenn.....	2,539 95
Louisville, Ky.....	102 85
	135,979 13

New Passenger Station at Salisbury, N. C.....	13,814 20
New Freight Stations and Additional Facilities.....	24,158 99
New Station Buildings at Various Points.....	52,501 58
New Shop Buildings, Tools and Machinery.....	74,805 65
New Coaling and Water Stations, Roadway and Other Buildings.....	13,217 83
Interlocking and Block Systems.....	24,407 65
New Steel Bridges.....	51,754 52
Filling Trestles.....	4,253 35
Turntables.....	5,560 17
Track Scales.....	3,444 56
Net Cost of Passing, Side and Industrial Tracks.....	176,123 62
Miscellaneous Items.....	47,496 23
Total Additions.....	\$1,831,934 00

## Less:

Cedar Bluff, Ala., Extension removed.....	33,960 11
Net Increase.....	\$1,797,973 89

## Cost of Equipment:

The Cost of Equipment on June 30, 1909, was.....	\$31,855,613 13
The Cost of Equipment on June 30, 1908, was.....	29,637,600 62
Net Increase.....	\$2,218,012 51

This increase represents the proportion of payments made during the year on equipment obligations for new and additional equipment charged to capital account as follows:

60 Locomotives.....	\$973,607 07
1623 Freight-Train Cars.....	1,234,250 78
1 Pile Driver.....	9,012 37
2 Scale Test Cars.....	1,142 29
	\$2,218,012 51

The total payments for Equipment during the year amounted to..... \$3,100,214 95

Of which there was charged to:

Capital Account.....	\$2,218,012 51
Replacement Account.....	882,202 44
	\$3,100,214 95

## Special Deposit with Financial Agent:

Deposited with The New York Trust Company..... \$11,105,000 00

This amount represents deposit with The New York Trust Company to retire Southern Railway Three-Year Convertible Six Per Cent. Notes, dated May 1, 1908, and maturing May 1, 1911, which have been called for redemption on November 1, 1909, as provided for in the indenture.

## Securities in Treasury Unpledged:

On June 30, 1909, there were in the Treasury unpledged, securities as follows:	
Unpledged, held for special purposes.....	\$10,774,697 05
Miscellaneous Securities.....	4,015,569 88
Southern Railway Company Development and General Mortgage Four Per Cent. Bonds, Series A.....	\$759,000 00
Southern Railway Company First Consolidated Mortgage Five Per Cent. Bonds and Scrip.....	65,300 00
	824,300 00

Total..... \$15,614,566 93  
The par value of which is..... \$21,492,570 68

## Advances to Subsidiary Companies:

On June 30, 1909, advances to subsidiary companies for construction and improvements amounted to.....	\$925,622 31
On June 30, 1908, they amounted to.....	1,362,035 04
Decrease during the year.....	\$436,412 73

## Insurance Fund:

This Fund, amounting to \$620,659.19 on June 30, 1909, is represented by:

Cash.....	\$29,540 64
Miscellaneous Securities costing.....	591,118 55
	\$620,659 19

## Net Discount on Securities Sold:

The balance in this account on June 30, 1909, amounting to \$7,797,910.65, represents the net balance of Premium and Discount on securities of the Company sold since its organization. It has been the policy of the Company to charge this off to Income proportionately during the life of the securities or from time to time to Profit and Loss.

There was charged off during the year ended June 30, 1909, to:

Income (See Table 2, page 28, Pamphlet Report).....	\$535,214 44
Profit and Loss (See Table 4, page 31, Pamphlet Report).....	3,186,590 00
Total.....	\$3,721,714 44
Similar charges during the previous year, to Income, amounted to.....	358,661 99

## Funded Debt:

The Funded Debt on June 30, 1909, was.....	\$234,002,400 00
The Funded Debt on June 30, 1908, was.....	228,701,000 00

Net Increase..... \$5,301,400 00

The Additions during the year were:

Southern Railway Company First Consolidated Mortgage Five Per Cent. Bonds..... \$2,024,000 00

Issued for the following purposes:

To acquire an equal amount of Charlottesville & Rapidan Railroad First Mortgage Six Per Cent. Bonds.....	\$25,000 00
To acquire an equal amount of Charlotte, Columbia and Augusta Railroad First Mortgage Five Per Cent. Bonds, Extended.....	755,000 00
To acquire an equal amount of Franklin & Pittsylvania Railroad First Mortgage Six Per Cent. Bonds.....	5,000 00
To acquire an equal amount of Richmond & Danville Railroad Consolidated Mortgage Six Per Cent. Bonds.....	1,081,000 00
To acquire an equal amount of Western North Carolina Railroad First Consolidated Mortgage Six Per Cent. Bonds.....	61,000 00
To acquire an equal amount of Virginia Midland Railway Serial Mortgage Six Per Cent. Bonds, Series B.....	49,000 00
To acquire an equal amount of Columbia & Greenville Railroad First Mortgage Six Per Cent. Bonds.....	48,000 00

Southern Railway Company Development and General Mortgage Four Per Cent. Bonds, Series A..... 24,186,000 00

Issued for the following purposes:

To retire at maturity, April 1, 1909, Southern Railway Co. Collateral Trust Five-Year Five Per Cent. Bonds.....	\$16,000,000 00
For expenditures for New and Additional Equipment charged to Capital.....	2,010,000 00
For Improvements and Betterments and for the acquisition of Additional Property during the calendar year 1909, as provided for in the Mortgage.....	5,000,000 00
For advances to subsidiary lines under construction.....	1,176,000 00

Southern Railway Co. Three-Year Six Per Cent. Convertible Notes issued to temporarily reimburse the Company for construction expenditures..... 1,000,000 00

Southern Railway Co. Mobile & Ohio Collateral Four Per Cent. Bonds, issued to acquire an equal amount of Mobile & Ohio Railroad Co. General Mortgage Four Per Cent. Bonds..... 5,000 00

Total Additions..... \$27,215,000 00

The Reductions during the year were:

Charlottesville, Columbia & Augusta Railroad First Mortgage Five Per Cent. Bonds, Extended, acquired.....	\$755,000 00
Charlottesville & Rapidan Railroad First Mortgage Six Per Cent. Bonds, acquired.....	24,000 00
Columbia & Greenville Railroad First Mortgage Six Per Cent. Bonds, acquired.....	48,000 00
Richmond & Danville Railroad Consolidated Mortgage Six Per Cent. Bonds, acquired.....	1,081,000 00
Southern Railway Company Three-Year Six Per Cent. Convertible Notes, redeemed May 1, 1909.....	3,895,000 00
Southern Railway Company Collateral Trust Five-Year Five Per Cent. Bonds, retired at maturity.....	16,000,000 00
Virginia Midland Railway Serial Mortgage Six Per Cent. Bonds, Series B, acquired.....	49,000 00
Western North Carolina Railroad First Consolidated Mortgage Six Per Cent. Bonds acquired.....	61,000 00
Total Reductions.....	21,912,000 00
Net Increase.....	\$5,301,400 00

## Equipment Obligations:

The unmaturing Equipment Obligations outstanding on June 30, 1909, were..... \$14,475,163 07

There were outstanding on June 30, 1908..... 17,565,286 80

Decrease during the year..... \$3,090,123 73

This decrease represents payments at maturity of Equipment Obligations as follows:

Equipment Trust, Series B (Final Payment).....	\$170,000 00
Equipment Trust, Series C.....	458,000 00
Equipment Trust, Series D.....	354,000 00
Equipment Trust, Series E.....	294,000 00
Equipment Contract, Series F.....	85,330 00
Equipment Contract, Series G.....	188,100 00
Equipment Trust, Series H.....	450,000 00
Equipment Trust, Series K.....	280,000 00
Equipment Trust, Series L.....	600,000 00
Miscellaneous Equipment Contracts.....	210,683 73
Decrease as above.....	\$3,090,123 73

The Equipment Obligations on June 30, 1909, amounting to..... \$14,475,163 07 represent unmatured balances on trusts and contracts covering the following equipment, viz:

60 Locomotives.....	
25,000 Freight-Train Cars.....	
196 Convertible Ballast Cars.....	
10 Work-Train Cars.....	
The contract price of which was.....	\$31,836,628 52
Of which there was paid to July 1, 1909.....	17,361,465 45

Balance unmatured as stated..... \$14,475,163 07

## Undetermined Liabilities Awaiting Adjustment:

The balance in this account on June 30, 1909, amounting to.....	\$1,743,986 71
represents undetermined liabilities and possible shrinkage in current assets as follows:	
Loss, Damage and Overcharge on Freights.....	\$829,644 14
Personal Injuries.....	582,142 17
Mileage Tickets Not Presented for Passage.....	226,880 57
Damage to Property.....	8,592 46
Mail Fines.....	339 59
Bad Debts.....	86,387 78
	\$1,743,986 71



TABLE 2.

INCOME ACCOUNT FOR YEAR ENDED JUNE 30, 1909, COMPARED WITH YEAR ENDED JUNE 30, 1908.

1908.	1909.	1908.	1909.
\$34,171,329 17	\$34,376,619 13	Operating Revenues:	
14,315,961 38	13,510,791 49	Freight.....	
249,031 40	267,721 31	Passenger.....	
1,714,942 31	1,485,392 44	Miscellaneous Passenger-Train Revenue.....	
1,619,920 17	1,491,643 68	Mail.....	
568,979 36	758,344 00	Express.....	
301,552 72	287,794 59	Other Transportation Revenue.....	
		Other Revenue from Operations.....	
\$52,941,716 51	\$52,188,106 64	Total Operating Revenues.....	
		Operating Expenses:	
\$7,109,173 22	\$6,016,660 64	Maintenance of Way and Structures.....	
9,138,378 02	8,193,753 44	Maintenance of Equipment.....	
1,300,232 93	1,252,328 45	Traffic Expenses.....	
20,773,252 97	19,348,507 08	Transportation Expenses.....	
1,533,684 99	1,757,730 90	General Expenses.....	
\$9,854,722 13	\$5,568,980 60	Total Operating Expenses.....	
\$13,086,594 38	\$16,619,126 04	Net Operating Revenue.....	
21,362 65	136,963 39	Outside Operations.....	
\$13,108,257 03	\$16,756,089 43	Net Revenue.....	
2,027,967 35	1,916,701 65	Taxes Accrued.....	
\$11,080,289 68	\$14,839,387 78	Operating Income.....	
		Other Income:	
\$21,000 00	\$21,000 00	Rents Accrued from Lease of Road.....	
182,220 71	189,185 80	Rents Accrued from Joint Tracks, Yards and Terminals.....	
105,552 13	114,051 73	Miscellaneous Rents.....	
2,127,269 75	1,941,125 92	Income from Investments.....	
330,634 27	622,948 25	Miscellaneous Interest and Commissions.....	
2,766,676 86	2,898,311 70	Total Other Income.....	
\$13,846,966 54	\$17,737,699 48	Total Gross Income.....	
\$1,351,860 25	\$1,351,504 00	Deductions from Total Gross Income:	
717,751 45	708,094 52	Rents Accrued for Lease of Other Roads (see Table 3 of pamphlet report).....	
121,090 80	19,493 39	Rents Accrued from Joint Tracks, Yards and Terminals.....	
41,351 74	45,714 79	Balance.....	
103,515 30	81,463 71	Miscellaneous Rents.....	
258,661 99	535,214 44	Separately Operated Properties.....	
226,808 00	226,808 00	Discount on Bonds Sold—Proportion charged to Income.....	
213,292 28	31,290 36	Dividends Accrued on Southern Railway, Mobile & Ohio Stock Trust Certificates.....	
3,134,341 81	3,060,583 21	Miscellaneous Deductions.....	
\$10,712,624 73	\$14,677,116 27	Total.....	
10,510,774 80	11,087,730 85	Total Available Income.....	
\$401,849 93	\$3,589,385 42	Interest on Funded Debt and Equipment Obligations (see Table 3 of pamphlet report).....	
122,707 37	78,285 18	Balance of Income over Charges.....	
\$279,142 56	\$3,511,100 24	Additions and Betterments.....	
		Balance Carried to Credit of Profit and Loss for the Year.....	

## INCOME ACCOUNT.

## Operating Revenues and Expenses:

The Operating Revenues and Expenses as shown for the year ended June 30, 1908, include Revenues and Expenses incident to the operations of the Nashville Division (Tennessee Central Railroad) and those of the Mississippi Division (Southern Railway in Mississippi) for the entire year, the operations of which lines were discontinued by Southern Railway Co. as of June 30, 1908, and December 31, 1908, respectively:

The Net Operating Revenue for the year ended June 30, 1908, was.....\$16,619,126 04  
The Net Operating Revenue for the year ended June 30, 1909, was.....\$13,108,257 03

Increase during the year.....\$3,532,121 66

## Interest on Funded Debt and Equipment Obligations:

Charges for the year ended June 30, 1909, amounted to.....\$11,087,730 85  
Similar charges for the previous year amounted to.....10,510,774 80

Net Increase.....\$776,956 05

## The Increases during the year were due to:

Sale or exchange of:  
\$1,994,000 First Consolidated Mortgage Five Per Cent. Bonds.....\$59,686 25  
41,333,000 Development and General Mortgage Four Per Cent. Bonds, Series A.....357,152 78  
5,000 Southern Railway, Mobile & Ohio Collateral Four Per Cent. Bonds.....290 00  
One year's Interest on \$300,000 Memphis Division First Mortgage Five Per Cent. Bonds as against nine months for previous year.....3,750 00  
Interest on \$15,000,000 Three-Year Convertible Notes, of which \$3,895,000 were retired during the year, as against various issues and dates during the previous year.....704,662 67  
As previously stated, the balance of these notes have been called for redemption on November 1, 1909, and the amount necessary to pay them off, derived from the sale of some of the Development and General Mortgage Bonds above mentioned, has been deposited with the Trustee.

Total.....\$1,125,461 70

## The Decreases during the year were as follows:

Interest on Southern Railway Collateral Trust Five-Year Bonds, retired April 1, 1909.....\$200,000 00  
Interest on Divisional Prior Lien Bonds exchanged.....32,280 49  
Interest on Equipment Trust Obligations retired.....116,225 16  
Total.....348,505 65

Net Increase as above.....\$776,956 05

TABLE 4.—PROFIT AND LOSS ACCOUNT FOR YEAR ENDED JUNE 30, 1909.

Balance at Credit of this Account June 30, 1908.....	\$5,791,185 22
Add:	
Credit Balance of Income for the Year.....	\$3,511,100 24
Net Miscellaneous Credits.....	\$46,222 35
	4,357,322 59
Deduct:	
Discount on Bonds charged to Profit and Loss during the year.....	3,186,500 00
Credit Balance June 30, 1909.....	\$6,962,007 81

TABLE 13.

TRAFFIC STATISTICS FOR YEARS ENDED JUNE 30, 1909 AND 1908.

	1908.	1909.	Percentage of Inc. or dec.
Average miles of road operated.....	7,170.36	7,136.32	Increase 0.48
Passenger Traffic:			
Number of passengers carried.....	14,977,980	14,091,835	Increase 6.29
Number of passengers carried one mile.....	622,561,542	605,331,590	Increase 2.83
Average distance hauled per passenger (miles).....	41.57	42.96	Increase 3.24
Total revenue from passengers.....	\$13,510,791.49	\$13,887,899.83	Increase 2.72
Average receipts per passenger per mile (cents).....	2.170	2.294	Increase 5.41
Total passenger-train revenue.....	\$16,765,358.92	\$17,397,162.40	Increase 3.63
Passenger-train revenue per mile of road.....	2,338.15	2,437.83	Increase 4.29
Passenger-train revenue per train mile.....	1,156.13	1,116.69	Increase 3.44
Average number of passengers in each train.....	42.89	38.86	Increase 10.37
Average number of passengers in each car.....	13.75	12.80	Increase 7.42
Freight Traffic:			
Revenue Freight:			
Number of tons carried.....	22,131,389	22,229,200	Increase 0.43
Number of tons carried one mile.....	3,612,870,632	3,419,824,957	Increase 5.64
Average distance hauled per ton (miles).....	163.23	153.84	Increase 6.10
Total freight-train revenue.....	\$14,376,619.13	\$13,325,759.08	Increase 3.15
Average receipts per ton per mile (cents).....	0.952	0.974	Increase 2.26
Freight-train revenue per mile of road.....	4,794.27	4,689.88	Increase 2.66
Freight-train revenue per train mile.....	2,054.15	1,992.12	Increase 7.83
Average number of tons of freight in each train.....	215.57	195.19	Increase 10.44
Average number of tons of freight in each loaded car.....	14.29	14.50	Increase 2.97
All Freight (including Company's material hauled free):			
Number of tons carried.....	26,304,356	26,121,837	Increase 0.69
Number of tons carried one mile.....	4,464,752,873	4,079,579,471	Increase 9.68
Average distance hauled per ton of freight in each train.....	266.40	232.33	Increase 14.66
Average number of tons of freight in each loaded car.....	17.54	17.26	Increase 1.62
Total Traffic and Operating Expenses:			
Passenger and freight-train revenue.....	\$14,141,978.65	\$15,722,821.48	Increase 0.83
Passenger and freight-train revenue per mile of road.....	7,132.42	7,107.71	Increase 0.35
Gross operating revenue.....	\$12,188,106.64	\$11,581,349.18	Increase 1.18
Gross operating revenue per mile of road.....	7,378.31	7,228.00	Increase 0.70
Gross operating revenue per revenue train mile.....	1,729.01	1,613.92	Increase 7.07
Operating expenses (taxes excluded).....	\$35,568,980.60	\$38,579,411.09	Increase 7.80
Operating expenses per mile of road.....	4,960.56	5,406.07	Increase 8.24
Operating expenses per revenue train mile.....	1,177.73	1,207.11	Increase 2.43
Net operating revenue.....	\$16,619,125.94	\$13,004,329.09	Increase 27.82
Net operating revenue per mile of road.....	2,317.75	1,821.93	Increase 27.21
Net operating revenue per revenue train mile.....	0.55028	0.40681	Increase 35.27

## West Virginia Board of Trade.

The program for the fifth annual meeting of the West Virginia Board of Trade at Huntington this week included, beside the address of welcome by Mayor Rufus Switzer of Huntington, the reply of W. C. McConaughy of Parkersburg and the annual address by President William A. MacCorkle of Charleston; addresses by John S. Darst, auditor of West Virginia, on "The State's Finances," by Col. John E. Day, editor *Wetzel Republican*, on "The Semi-Centennial;" by James H. Stewart, director West Virginia Agricultural Experiment Station; by Governor William E. Glasscock, on "The State's Needs;" by ex-Governor Henry G. Davis, on "West Virginia's Future;" by Charles P. Light, Commissioner of Public Roads, on "The New Road Laws;" by Edgar D. Baker,

State Engineer, on "A Condition, Not a Theory, Confronts Us," and by Stuart F. Reed, Secretary of State, on "State Development."

Manual for Engineers. By Chas. E. Ferris, B.S. Publisher, University of Tennessee, Knoxville. Price 50 cents.

At a great deal of expense the plates of this standard publication have been overhauled, many being taken out that seemed to be somewhat obsolete and replaced with new data in order to bring the book up to date. Some of the most important tables in the book are as follows: Areas and circumference of circles; square and cube roots; sines, tangents and secants, both natural and common; steam tables dealing with capacity of turbines; quite extensive tables for electric wiring; interest tables, etc. This publication has come to be a vast pocket standard, and is carried by thousands of engineers all over the land.

[Continued from Page 69.]

forces of manufacturing to the best advantage, which on account of their wide scope and thoroughly original treatment attracted wide attention. These articles have been fully revised, in great part rewritten and much amplified in this volume, which should interest a much larger class of students than manufacturers.

#### The Romance of Modern Manufacture.

By Charles R. Gibson. Publisher, J. B. Lippincott Company, Philadelphia. Price \$1.50.

Beginning with a sketch of the evolution of the steam engine to the point at which it became a source of power for industrial purposes, the point really marking the beginning of modern manufacture, Mr. Gibson treats of spinning, weaving, embroidery and knitting by machinery, mechanical clothes-washing, sewing machines and their manufacture, automatic needle-makers, thread-making and the manufacture of shoes, pottery, paper, books, light, candles, bread, clocks and watches, iron, steel rails, the locomotive and shipbuilding, employing every-day language in giving a clear, popular conception of different subjects without diminishing any of their technical value. The volume by no means attempts to exhaust all the revolutions which have been wrought by the substitution of machinery for hand power or animal power, but with its 28 illustrations and 16 diagrams it is an interesting survey of a century and a half of the manufacturing age.

West Virginia Geological Survey. Volume 4, Iron Ores, Salt, Sandstone. By Dr. I. C. White, State Geologist, Morgantown. Price \$2.

This volume of 603 pages gives descriptions of analyses of all the principal iron ore deposits of the State, together with a history of the old charcoal furnace industry. The main building stones of the State are also described and elaborate tests of their strength and crushing limit made by the War Department at the Watertown Arsenal, and also by the United States Geological Survey testing laboratory at St. Louis, together with chemical analyses, petrographic determinations, etc. The glass sands are also described and analyses given. The salt industry and the different brines of the State are also fully described, and chemical analyses published. The report is illustrated with 24 page plates and 16 figures and maps, and in the text showing location of iron ores, geological structures, illustrations of blast furnaces, etc.

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD.

Baltimore, Md., October 13.

There was a moderate amount of business in the Baltimore stock market during the past week. In the trading United Railways common, trust certificates, sold at 14; do. incomes, 58½ to 58¾; do. funding 58, 85 to 84½; do. do. scrip, 85; do. 4s, 87¾ to 87½; Consolidated Gas, Electric Light & Power common, 38; do. preferred, 86 to 85½; Consolidated Gas 6s, 100¾; do. 4½s, 95; Seaboard Air Line, 17; Seaboard Company common, 18; do. second preferred, 38½ to 38; Seaboard 4s, certificates, 81¼ to 81; do. three-year 5s, 98½ to 98¾; do. 10-year 5s, 99½; Seaboard adjustment 5s, when issued, 70; Consolidated Cotton Duck preferred, 20; Mt. Vernon-Woodberry Cotton Duck 5s,

79½ to 77¾; G. B. S. Brewing incomes, 13½ to 14; do. 1sts, 44½ to 44.

Bank stock sold as follows: Merchants', 168; Bank of Baltimore, 125; Mechanics', 28¼; Union, 122.

American Bonding sold from 80 to 78; United States Fidelity & Guaranty, 142 to 140; Fidelity & Deposit, 160; Continental Trust, 222; Mercantile Trust, 151.

Other securities were traded in thus: Norfolk Railway & Light, 20; Houston Oil common, 8¾ to 8½; do. preferred, 39 to 40; Baltimore, Sparrows Point & Chesapeake 4½s, 93 to 93½; Maryland Telephone 5s, guaranteed, 99½; Northern Central Railway stock, 107¾ to 105½; Atlantic Coast Line consolidated 4s, 95½; do. new 4s, certificates, 91; do. Connecticut 5-20s, 91; Baltimore City Passenger 5s, 100¾; Detroit United 4½s, 84; Georgia, Carolina & Northern 5s, 105½; Alabama Consolidated Coal & Iron common, 40; do. preferred, 71¾; do. 5s, 85¼; Fairmont & Clarksburg Traction 5s, 96¾; Maryland Electric 5s, 98¼ to 98¾; Memphis Street Railway 5s, 99; Cincinnati Gas Transportation Co. 5s, 1933 (guaranteed by Columbia Gas & Electric Co.), 91; Consolidation Coal, 100 to 99; Norfolk Railway & Light 5s, 99; Carolina Central 4s, 93; Cincinnati Gas Transportation Co. 5s (guaranteed by the Columbia Gas & Electric Co. and the Cincinnati Gas & Electric Co.), 97½; Consolidation Coal, scrip, 100; West Virginia Central 6s, 101¾; Baltimore City 3½s, 1928, 98½; do. do. 1930, 98½; Milwaukee Gas 4s, 91½; Atlanta Consolidated Street Railway 5s, 105; Washington, Baltimore & Annapolis 5s, 70; Coal & Iron Railway 5s, 102½.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended October 13, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	133	...
Atlantic Coast of Conn.....	100	310	317½
Georgia Sou. & Fla.....	100	33	...
Georgia Sou. & Fla. 1st Pfd.....	100	95	97½
Georgia Sou. & Fla. 2d Pfd.....	100	75	78
Norfolk Railway & Light.....	25	19	20
Seaboard Company Common.....	100	17	...
Seaboard Company 2d Pfd.....	100	35	38½
United Ry. & Elec. Co.....	50	13	...

Bank Stocks.	Par.	Bid.	Asked.
Commer. & Farmers Nat. Bk.....	100	85	110
Farmers & Mer. Nat. Bk.....	40	47½	...
First National Bank.....	100	135	140
Maryland National Bank.....	20	21	...
Merchants' National Bank.....	100	165	168
National Bank of Baltimore.....	100	125	...
National Bank of Commerce.....	15	28½	...
National Mechanics' Bank.....	10	28	29
National Union Bank of Md.....	100	122	125

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.....	25	76	79
Baltimore Trust & Guarantee.....	100	285	300
Colonial Trust.....	50	230	234
Continental Trust.....	100	230	234
Fidelity & Deposit.....	50	160	...
Fidelity Trust.....	100	206½	210
International Trust.....	100	142½	...
Mercantile Trust & Deposit.....	50	151½	...
Union Trust.....	50	75	...
U. S. Fidelity & Guaranty.....	100	140	145
United Surety.....	100	139	...

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron.....	100	35	45
Ala. Con. Coal & Iron Pfd.....	100	70	72
Con. Cotton Duck Common.....	50	7	...
Con. Cotton Duck Pfd.....	50	29	...
Con. Gas, Elec. Lt. & P. Com.....	100	36	39
Con. Gas, Elec. Lt. & P. Pfd.....	100	84½	85½
Consolidation Coal.....	100	99	99½
G. B. S. Brewing Co.....	100	2½	2½
Georges Creek Coal.....	100	92½	97
Mer. & Miners' Trans. Co.....	100	75½	...

Railroad Bonds.	Par.	Bid.	Asked.
Atlantic Coast Line 1st 4s, 1952.....	95½	96	...
Atlan. Coast Line 4s, Cfs., 1952.....	98	98	...
At. Coast Line Com. 4s, Cfs., 5-20s.....	92½	93½	...
Atlan. Coast Line (Conn.) 4s, Cfs., 1948.....	85	85	...
Carolina Central 4s, 1949.....	98½	99	...
Charleston & West'n Car. 5s, 1946.....	109	109	...
Coal & Iron Railway 5s, 1929.....	102½	103	...
Col. & Green, 1st 6s, 1916.....	107	107	...
Georgia & Alabama 5s, 1943.....	104½	105½	...
Ge. Car. & Northern 1st 5s, 1929.....	105½	106½	...
Georgia Pacific 1st 6s, 1922.....	115½	117	...
Ge. South. & Fla. 1st 5s, 1945.....	109	109½	...
Md. & Penna. 4s, 1951.....	92½	93	...
Macon, Dublin & Savannah 5s.....	95	97	...
Potomac Valley 1st 5s, 1944.....	95	95	...
Richmond & Dan. Gold 6s, 1915.....	106	106	...
Seaboard Air Line 4s, 1950.....	90½	91	...
Seaboard Air Line 5s, 10-year, 1911.....	99½	99½	...
Seaboard Air Line 5s, 3-year.....	98½	98½	...
Seaboard & Roanoke 6s, 1916.....	100	100	...
Seaboard & Roanoke 5s, 1926.....	107½	108½	...
Suffolk & Carolina 5s, 1952.....	95½	96	...
Virginia Midland 2d 6s, 1911.....	102½	103	...
Washington, Balto. & Ann. 5s.....	71	71	...
Western N. C. Con. 6s, 1914.....	108	108	...
W. Va., Cont. 1st 6s, 1911.....	101½	103	...
W. Va., Col. & Aug. 6s, 1910.....	101	101	...

Street Railway Bonds.	Par.	Bid.	Asked.
Atlanta Con. Street Railway 5s.....	105	105½	...
Balto. City Pass. 5s, 1911.....	100½	100½	...

Balto., Sp. Pt. & C. 4½s.....	93	93½	...
Balto. Trac. 1st 5s, 1929.....	110	111½	...
Balto. Trac. (N. B. Div.) 5s, 1942.....	113	113	...
Central Ry. Con. 5s (Balto.), 1932.....	110½	110½	...
Central Ry. Ext. 5s (Balto.), 1932.....	110½	110½	...
City & Suburban 5s (Balto.), 1922.....	107	108	...
City & Suburban 5s (Wash.), 1948.....	103½	103½	...
Knoxville Traction 1st 5s, 1928.....	105	105	...
Lexington Railway 1st 5s, 1949.....	108	108	...
Macon Ry. & Lt. 1st Con. 5s, 1930.....	95	97½	...
Maryland Electric Railways 5s.....	98½	98½	...
Memphis Street Railway 5s.....	99	100	...
Metropolitan 5s (Wash.), 1925.....	114	114	...
Newport News & Old Pt. 5s, 1938.....	95	95	...
Norfolk & Portsmouth Trac. 5s.....	84	84	...
Norfolk Railway & Light 5s.....	98	99½	...
Richmond Traction 5s.....	102	102	...
St. Louis Ry. 1st 4s, 1930.....	87½	87½	...
United Railways Inc. 4s, 1949.....	58	58½	...
United Railways Fdg. 5s.....	84½	84½	...

Miscellaneous Bonds.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron 5s.....	85½	85½	...
Atlanta Gas 1st 5s, 1947.....	103	103	...
Consolidated Gas 6s, 1919.....	100½	101½	...
Consolidated Gas 4½s.....	94	96	...
Con. Gas, Elec. Lt. & P. 4½s.....	86	86	...
Fairmont Coal 5s.....	96½	97	...
G. B. S. Brewing 1st 4s.....	44	44½	...
G. B. S. Brewing Inc. 4s.....	13½	13½	...
Maryland Telephone 5s.....	99	99½	...
Mt. Vernon-Woodberry Cot. Duck 5s.....	73½	73½	...
Somerset Coal 1st 5s.....	94½	97	...

### SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending October 11.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	75
Alken Mfg. Co. (S. C.).....	85	85
American Spinning Co. (S. C.).....	155	155
Anderson Cotton Mills (S. C.).....	56	60
Arkwright Mills (S. C.).....	100½	100½
Augusta Factory (Ga.).....	66	70
Avondale Mills (Ala.).....	115	125
Belton Mills (S. C.).....	119	121
Bibb Mfg. Co. (Ga.).....	111	114
Brandon Mills (S. C.).....	97	99
Cabarrus Cotton Mills (N. C.).....	125	125
Chadwick-Hoskins Mfg. Co. (N. C.).....	100	100
Chadwick-Hoskins Mfg. Co. (N. C.) Pfd.....	102	102
Chiquola Mfg. Co. (S. C.).....	165	167
Clifton Mfg. Co. (S. C.).....	105	105
Clifton Mfg. Co. (S. C.) Pfd.....	90	101
Clinton Cotton Mills (S. C.).....	110	120
Columbus Mfg. Co. (Ga.).....	93	96
Courtenay Mfg. Co. (S. C.).....	97	100
Dallas Mfg. Co. (Ala.).....	97	106
Darlington Mfg. Co. (S. C.).....	74	76
Drayton Mfg. Co. (Ala.).....	100	100
Eagle & Phenix Mills (Ga.).....	135	135
Easley Cotton Mills (S. C.).....	162	165
Enoree Mfg. Co. (S. C.).....	52	62
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	90
Exposition Cotton Mills (Ga.).....	240	240
Gaffney Mfg. Co. (S. C.).....	75	81
Gainesville Cotton Mills (Ga.).....	68	68
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Graniteville Mfg. Co. (S. C.).....	100	105
Greenwood Cotton Mills (S. C.).....	60	68
Grendel Mills (S. C.).....	112	114½
Henrietta Mills (N. C.).....	100	100
King Mfg. Co. (S. C.).....	95	100
Lancaster Cotton Mills (S. C.).....	125	146
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	96	100
Laurens Cotton Mills (S. C.).....	129	125
Limestone Mills (S. C.).....	150	175
Lockhart Mills (S. C.).....	78	90
Lockhart Mills Pfd.....	99	100
Loray Mills (N. C.) Pfd.....	95	97½
Marlboro Cotton Mills (S. C.).....	85	85
Mayo Mills (N. C.).....	165	185
Mills Mfg. Co. (S. C.).....	97	105
Mills Mfg. Co. (S. C.) Pfd.....	109	109
Monaghan Mills (S. C.).....	118	122
Monaghan Mills (S. C.).....	118	125
Monarch Cotton Mills (S. C.).....	109	112
Newberry Cotton Mills (S. C.).....	120	140
Norris Cotton Mills (S. C.).....	122	126
Olympia Cot. Mills (S. C.) 1st Pfd.....	78	87½
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	98
Ort Cotton Mills (S. C.).....	100	101
Pacolet Mfg. Co. (S. C.).....	101	101
Pacolet Mfg. Co. (S. C.) Pfd.....	97	102
Pelzer Mfg. Co. (S. C.).....	150	160
Piedmont Mfg. Co. (S. C.).....	173	177
Pie Mfg. Co. (S. C.).....	160	165
Richland Cot. Mills (S. C.) 1st Pfd.....	45	45
Raleigh Cotton Mills (N. C.).....	100	106
Roanoke Mills (N. C.).....	153	165
Saxon Mills (S. C.).....	125	125
Sibley Mfg. Co. (Ga.).....	62½	66
Spartan Mills (S. C.).....	130	140
Springsteen Mills (S. C.).....	100	100
Tucapau Mills (S. C.).....	250	250
Trion Mfg. Co. (Ga.).....	140	140
Union-Buffalo Mills (S. C.) 1st Pfd.....	72	73
Victor Mfg. Co. (S. C.).....	127	131
Warren Mfg. Co. (S. C.).....	93½	95
Warren Mfg. Co. (S. C.) Pfd.....	95	108
Washington Mills (Va.).....	23	23
Washington Mills (Va.) Pfd.....	104	109
Whitney Mfg. Co. (S. C.).....	129	140
Williamston Mills (S. C.).....	115	115
Wiscasset Mills (N. C.).....	120	120
Woodruff Cotton Mills (S. C.).....	140	155
Woodside Cotton Mills (S. C.).....	96	100
Woodside Cot. Mills (S. C.) Pfd.....	95	98

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending October 11.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	70	75
Alken Mfg. Co. (S. C.).....	85	85
American Spinning Co. (S. C.).....	155	155
Arcadia Mills (S. C.).....	95	95
Arkwright Cotton Mills (S. C.).....	100	105
Augusta Factory (Ga.).....	66	70
Avondale Mills (Ala.).....	115	125
Belton Mills (S. C.).....	119	121
Brogan Mills (S. C.).....	30	30
Cannon Mfg. Co. (N. C.).....	135	135
Cabarrus Cotton Mills (N. C.).....	120	135
Chiquola Mfg. Co. (S. C.).....	155	155
Clifton Mfg. Co. (S. C.).....	105	110
Clinton Cotton Mills (S. C.).....	106	106
Columbus Mfg. Co. (Ga.).....	93	100
Courtenay Mfg. Co. (S. C.).....	95	95
Dallas Mfg. Co. (Ala.).....	97	97
Darlington Mfg. Co. (S. C.).....	74	74
D. E. Converse Co. (S. C.).....	163	163
Drayton Mills (S. C.).....	95	100
Eagle & Phenix Mills (Ga.).....	117	117
Easley Cotton Mills (S. C.).....	158	162

Enoree Mfg. Co. (S. C.).....	53	62
Enoree Mfg. Co. (S. C.) Pfd.....	90	100
Enterprise Mfg. Co. (Ga.).....	76	76
Exposition Cotton Mills (Ga.).....	196	200
Gainesville Cotton Mills (Ga.).....	90	95
Glenwood Cotton Mills (S. C.).....	145	145
Gluck Mills (S. C.).....	92	96
Graniteville Mfg. Co. (S. C.).....	155	165
Grendel Mills (S. C.).....	112	115
Hartsville Cotton Mill (S. C.).....	150	150
Henrietta Mills (N. C.).....	150	165
Inman Mills (S. C.).....	107	112
Lancaster Cotton Mills (S. C.).....	118	126
Lancaster Cot. Mills (S. C.) Pfd.....	97	97
Langley Mfg. Co. (S. C.).....	95	100
Laurens Mills (S. C.).....	127	127
Limestone Mills (S. C.).....	150	150
Lockhart Mills (S. C.).....	98	98
Lockhart Mills (S. C.) Pfd.....	98	98
Loray Cotton Mills (N. C.) Pfd.....	92	96
Marlboro Cotton Mills (S. C.).....	82	82
Mills Mfg. Co. (S. C.).....	92	98
Molloy Mfg. Co. (S. C.).....	105	105
Monaghan Mills (S. C.).....	117	122
Monarch Cotton Mills (S. C.).....	104	104
Newberry Cotton Mills (S. C.).....	115	



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In strongest mill corporations.  
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Capital, \$1,500,000  
Surplus and Profits, - - - \$900,000  
Deposits \$12,000,000  
Accounts of Banks, Bankers, Corporations  
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T. K. SANDS, 2d Vice-President and Cashier.  
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In aiding the development of legitimate  
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Is especially interested in the develop-  
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Capital, \$1,000,000  
July 15, 1908, Surplus and Profits, \$671,631.80  
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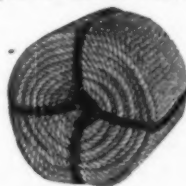
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**TRANSMISSION ROPE**

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Ga., Morven.—An official letter confirms the report that the Farmers & Merchants' Bank has begun business with Jno. D. Walker, president, Sparta, Ga., and E. Lloyd Knight, cashier, Morven, Ga.

Ga., Raymond.—Official: The Bank of Raymond, chartered with \$25,000 capital, began business October 1 with S. T. Blalock, president, and E. J. Bailey, cashier; directors, A. H. Young, W. S. McDonald, J. W. Melson, J. G. Witch, W. E. McGee, Tobe Donegan and C. J. Owens.

Ga., Waverly Hall.—Reports state that the Farmers' Banking Co. will begin business about October 15 with I. H. Pitts as president. The incorporators are G. A. Byrd, Robert L. Baldwin and others.

Ga., Wrightsville.—Official: The Exchange Bank chartered; capital \$25,000; U. R. Enkins, president; J. M. Mason, vice-president; Bank chartered; capital \$25,000; U. R. Jenkins, A. F. Daley, T. G. Hart, J. T. Fulforce, C. T. Bray, P. B. Beddingfield and Jon Mason.

Ky., Greenville.—Official: The Farmers' State Bank chartered; L. W. Irvin, president; Jno. M. Corley, vice-president, and H. L. Stum, cashier.

Ky., Louisville.—The Equity Life Insurance Co., capital \$25,000, has been incorporated by W. H. Harvey, Joseph T. Green and E. C. Smith.

Md., Sykesville.—The First National Bank of Sykesville has opened for business; president, F. G. Mercer; vice-presidents, A. F. Arrington and R. W. Carter; cashier, M. H. Weer; directors, R. R. Bennett, James R. Weer, D. M. Shoemaker, E. W. Snyder, Levi Barnes, J. T. Harris, John F. Sippel, R. W. Carter, A. F. Arrington, F. G. Mercer and H. E. Blake.

Miss., Pace.—Official: The Bank of Pace chartered; capital \$10,000; incorporators, M. D. Tucker, president, Beulah, Miss.; J. H. Pace, vice-president, Pace; E. H. Brown, cashier, Houston, Tex.; G. G. Tucker, E. H. Brown of Pace, E. J. Mosley, Holly Springs, and H. J. Brown, Houston, Tex.

Mo., Kansas City.—Official: The Drovers' National Bank incorporated under national laws; capital \$200,000; surplus, \$20,000; I. W. Anett, president; Thos. G. Hutt, vice-president, and R. E. Booth, cashier.

Mo., St. Louis.—The Mid-Continent Casualty Co., capital \$250,000, will, it is stated, soon begin business with James Y. Player, president; James Hagerman, Jr., vice-president; George Small, secretary-treasurer.

N. C., Cherryville.—Official: The First National Bank of Cherryville authorized to begin business; capital \$25,000; directors, S. S. Mauney, W. A. Mauney; M. L. Mauney, cashier; Chas. C. Blanton, G. S. Mauney, D. M. Baker and M. L. Rudisill.

N. C., Lumberton.—Official: The Farmers and Merchants' Bank of Robeson chartered; capital \$20,000; surplus \$2,000; directors, Robert E. Lee, T. A. McNeill, Sr., M. W. Floyd, A. J. Floyd, E. C. Nye, K. M. Barnes, J. E. Carlyle, J. H. Powers, W. R. McNeill, John Knox, Jr., and C. B. Skipper. T. A. McNeill, Sr., is president.

N. C., Maxton.—Official: The Bank of Robeson chartered; capital to be about \$250,000; S. A. Johnson and others organizers.

Okla., Enid.—W. E. Codgal, a director of the Bank of Enid, is reported interested in the organization of a national bank with \$200,000.

Okla., Enid.—The Enid Conservative Investment Co. has been chartered with \$10,000 capital. The incorporators are Richard Kennedy, C. L. Guy, J. M. Mieratt, W. T. Whitlock and W. Kennedy.

Okla., Eufaula.—The McIntosh Abstract & Realty Co. of Checotah and Eufaula, capital \$60,000, is reported incorporated by R. E. Robinson, C. A. Niles, A. A. Smith and R. R. Randall.

Okla., Hallett.—Chartered: The First State Bank, capital \$10,000. Incorporators, Erwin Cox, C. S. Bell, James Butcher, Hallett; Geo. O. Shepherd, Tuttle; W. D. Caldwell, Oklahoma City.

Okla., Hollis.—Official: The First State Bank of Hollis is a conversion of the First National Bank; directors, W. S. Cross, president; E. H. Gardner, vice-president; C. W. Gilliland, cashier, and H. Matherson.

S. C., Charleston.—The Metropolitan Building and Loan Association has been granted a charter; capital \$150,000; petitioners, R. G. Rhett, T. T. Hyde, H. L. Erckmann and M. R. Rivers.

S. C., Clinton.—Official: The Citizens' Building and Loan Association, authorized capital \$100,000, has been incorporated with charter to begin business with \$50,000; A. V. Martin, president; W. B. Farr, vice-pres-

dent, and B. H. Boyd, secretary and treasurer.

S. C., Marion.—The Marion County Trust Co., capital \$50,000, has organized with directors thus: W. H. Cross, W. S. Foxworth, Paul Schenck, R. J. Blackwell, W. Stackhouse; W. J. Montgomery, president; J. C. Mace, vice-president; W. S. Frye of Greensboro, N. C., secretary and treasurer.

S. C., Spartanburg.—The J. W. Alexander Investment Co., capital \$10,000, has been incorporated by J. W. Alexander, H. B. Carlisle, H. E. De Pass and J. W. Simpson.

Tenn., Columbia.—The Columbia Savings & Trust Co. is reported to have begun business with George McKennon, cashier.

Tenn., Elizabethton.—The First National Bank of Elizabethton has been authorized to begin business; capital \$25,000; H. E. Jones, president; D. Brumit, E. C. Alexander and J. E. Brading, vice-presidents; T. J. Williams, cashier.

Tenn., Hollow Rock.—A new bank capitalized at \$15,000 is reported organized; president, G. H. Watkins; vice-president, Dr. L. L. Duncan; cashier, Tom Harrison.

Tex., Bartlett.—The Bartlett State Bank is reported to be doing business with Jacob Isaac president, J. C. Holloman active vice-president, J. V. Morris first vice-president, J. W. Hightower second vice-president, G. A. Lindeman cashier; T. W. Talbot, J. N. L. McCurdy, Adolph Schweetner and A. Beckman, directors.

Tex., Beaumont.—The Empire Life Insurance Co., capital \$150,000, surplus \$50,000, has been authorized to begin business with Sam Park, president; T. S. Reed, first vice-president; George W. Carroll, second vice-president; T. W. Garrett, treasurer; J. Austin Strange, secretary; H. M. Hargrove, manager; W. P. Molette, attorney.

Tex., Karnes City.—The Texas-Vermont Loan Co. of Karnes City has been chartered with \$20,000 capital by J. L. Browne, J. H. Frost and J. W. Ruckman.

Tex., Overton.—The Farmers and Merchants' State Bank, capital \$10,000, has been incorporated by A. J. Smith, Otho S. Houston and W. F. Neal.

Tex., Pleasanton.—The Martin Abstract Co., capital \$2000, has been incorporated by W. W. Walling, James A. Walton and Jourdan Campbell.

Tex., Sutherland Springs.—Chartered: The First State Bank; capital \$10,000; incorporators, M. H. Howard, Tom Morgan, John S. Martin and others. It is stated that Mr. Morgan will be president.

Tex., Walnut Springs.—Chartered: The State Bank of Walnut Springs; capital \$10,000; incorporators, Jim Rushing, John Kirby, J. A. Rushing and B. E. Seale.

Tex., Westminster.—The First State Bank of Westminster has organized with J. S. Stewart president, W. A. McDougall vice-president and J. M. Kirby cashier; capital \$10,000.

Va., Herndon.—Approved: The National Bank of Herndon, Va., capital \$25,000. Incorporators, Ernest L. Robey, M. T. Wilkins, E. T. Deterior, Frank W. Huddleston and W. F. Middleton.

Va., Stanleyton.—Reports state that the new bank recently reported organized with \$25,000 capital is to be known as the Farmers and Merchants' Bank. E. T. Brumback is president and W. M. Long cashier.

Va., Warrenton.—The People's National Bank, capital \$50,000, is reported organized with directors thus: Albert Fletcher, W. E. Bishop, H. I. Hutton, S. C. Brittle, John S. Gaines, J. T. Cockrell, E. M. Newton, Henry Lynn, R. T. Fisher and J. J. Silvey.

#### NEW SECURITIES.

Ala., Gunterville.—Bids will be received until noon October 14 by J. H. Carter, Judge of Probate, for \$14,000 of 5 per cent. Marshall county jail-building bonds.

Ala., Tuscaloosa.—The election to vote on \$25,000 of 5 per cent. 20-year additional sewer bonds is to be held October 25.

Ark., Eldorado.—The Union Trust Co. of Little Rock has purchased \$30,000 of 6 per cent. sewer bonds of improvement district No. 1 at a premium of \$25.

Ark., England.—The Wm. R. Compton Company of St. Louis is reported to have purchased \$26,000 of 6 per cent. improvement bonds.

Ark., Hamburg.—Reported that \$30,000 of 6 per cent. school bonds have been purchased by the William R. Compton Company of St. Louis.

Ark., Helena.—Reports state that preparations are being made to issue \$500,000 of improvement district bonds.

Ark., Tupelo.—A. G. Edwards & Sons of St. Louis are reported to have purchased \$30,000 of 6 per cent. drainage bonds.

Fla., Bonifay.—Reported that an election is to be held to vote on \$15,000 of school-building bonds.

Fla., Lakeland.—An election is to be held November 18 to vote on \$65,000 of school-building bonds.

Fla., Miami.—An election is to be held November 23 to vote on \$150,000 of bonds.

Fla., Sarasota.—Reports state that \$25,000 of street-improvement bonds have been issued.

Ga., Brunswick.—An election is to be held in Glynn county in November to vote on \$50,000 of bonds for an extension of the Georgia Coast & Piedmont Railroad into Brunswick.

Ga., Dalton.—An election is to be held October 30, it is stated, to vote on \$10,000 of school annex building bonds.

Ga., Macon.—It is now stated that an issue

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Manufacturers of Brush Machinery

DETROIT, - - MICH.

### PROPOSALS.

#### Paving

#### NOTICE TO CONTRACTORS.

Sealed proposals shall be received by the Board of Supervisors at the Alexandria County Courthouse, at Ft. Myer Heights, Virginia, until ten o'clock A. M. Wednesday, October 27, 1909, for furnishing materials and the performance of labor required for grading, curbing and paving King street extended from the corporation limits of Alexandria city to the Union Station of the Washington Southern Railway Co., Alexandria county, Virginia. In accordance with drawings and specifications prepared by Geo. E. Garrett, Engineer of Alexandria county, Virginia.

Copies of drawings and specifications can be obtained from said Engineer upon application to him at St. Elmo, Va.

Each bid must be accompanied by a certified check for five hundred (\$500) dollars, made payable to the Board of Supervisors of Alexandria County, Virginia, as a guarantee that the bidder, if his bid be accepted, will execute the contract and furnish the required bond.

Each bid must be made on blank forms to be obtained from said Engineer.

The Board reserves the right to accept any or reject any or all bids.

#### Courthouse

#### NOTICE TO CONTRACTORS.

Dallas, N. C., October 9, 1909.

Sealed proposals are invited by the Board of County Commissioners of Gaston County for the erection and completion of a new county courthouse and county jail on the county's property in Gastonia, N. C., agreeable to plans and specifications prepared by Architects Milburn, Heister & Co., Washington, D. C. Plans are on file with the Register of Deeds at Dallas, at the architects' office, and at the City Hall, Gastonia, N. C. Each bid must be accompanied by a certified check on some well-known bank, made payable to John F. Leeper, Chairman, in the sum of \$1000, as evidence, if their bid is accepted, that they will enter into contract at once and give an acceptable guarantee company's bond in the sum of 50 per cent. of the contract price for the faithful performance of the contract. Each bid must be sealed and addressed to the Register of Deeds at Dallas, N. C., and marked plainly "Bid for County Courthouse," and must be filed on or before twelve o'clock noon November 16, 1909. The Commissioners reserve the right to reject any or all bids.

JOHN F. LEEPER,  
Chairman Board of County Commissioners.  
A. J. SMITH,  
Register of Deeds.

## WE OFFER, SUBJECT TO PRIOR SALE

# 6% GOLD BONDS

### The Mobile Portland Cement and Coal Company

offers at par and accrued interest \$500,000 worth of twenty-year, first mortgage, 6 per cent. gold bonds, in denominations of \$100 \$500 and \$1000; subscriptions paid in full or one-fifth cash and balance quarterly; this offer subject to prior sale. (Total authorized bond issue \$3,000,000.)

#### Securities

TRUST DEEDS constituting the first mortgage on 1768 acres of valuable cement land, 10,017 acres of very rich coal lands, perpetual lease on 4000 acres gas and oil lands, large dock and storage property in Mobile, Alabama, and improved steamboats and barge line, etc., to the value of \$4,775,000.

### Carnegie Trust Company of N. Y. City

trustee for these securities, hold all these properties in trust for the bondholders, and money from sale of bonds can only be used for improvement of property.

#### Investors' Opportunity

to participate in the earnings of the company. With each one hundred dollar (\$100) bond we will give one share of common stock, par value \$100, fully paid and non-assessable. This offer is subject to withdrawal without notice.

It is estimated that the annual profits of the Company from coal, cement, transportation and other resources will be \$1,850,000, or ten times the interest on the bond issue, which should assure the stockholders large dividends.

(There is no preferred stock.)

#### Location and Market

Place Mobile Portland Cement & Coal Co. beyond competition.

For further information write us for illustrated prospectus or mail your subscription now to

CARL O. SPARRWARDT,  
Financial Manager,

### Mobile Portland Cement & Coal Co.

Van Antwerp Bldg., Mobile, Ala.

#### OFFICERS

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Vice-Pres. Mobile & Ohio R. R.  
P. J. LYONS, Treas., Mobile. Vice-Pres.  
City Bank and Trust Co. Mayor of Mobile.  
O. GERLACH, Ph.D.,  
Former Mgr. Iowa Portland Cement Co., Iowa, Kan.  
Mgr. of Construction and Operation.

Subscriptions will be received by the following banks, Mobile, Ala.:

First National Bank.  
City Bank & Trust Co.  
Central Trust Co.  
People's Bank.  
Bank of Mobile.

CROSS CREEK COAL COMPANY 6% Gold bonds, total issue \$250,000. All have been disposed of to investors and bankers in different parts of the country, including Saco, Maine; Boston, Mass.; Rochester, N. Y.; Westfield, Olean, Fredonia and Buffalo, N. Y.; Franklin, Coudersport, Pittsburgh, Smethport, Shamokin and Fort Allegany, Pa.; Columbus, Dayton and Springfield, Ohio; Northfork, Welch and Bluefield, W. Va.; Roanoke, Va.; Nashville, Knoxville, Jasper, Chattanooga and South Pittsburg, Tenn.; Atlanta, Ga.; Lowell, Mass.; East Orange, N. J., and Washington, D. C., until now there are but \$30,000 of them left. These bonds are first lien on 7000 acres of the best coal properties in Tennessee, and \$75,000 of this money is being spent on an up-to-date coal works with a capacity of about 1000 tons a day. Particulars will be furnished from the office, 1006 Mutual Life Building, Buffalo, N. Y. P. S.—A bonus of preferred stock will be given with the bonds.

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Incorporated Under Special Act of Legislature

## BALTIMORE AUDIT COMPANY

1027-1029 Calvert Bldg., BALTIMORE, MD.

All work executed by or under direct supervision of Certified Public Accountants



of \$300,000 of courthouse and road bonds is under consideration by Bibb county.

Ky., Bellevue.—November 2 an election is to be held to vote on \$37,000 of street-improvement and \$8000 of culvert bonds.

Ky., Cynthiana.—Reports state that Harrison county has authorized an issue of \$24,000 of 4 per cent. refunding bonds.

Ky., Winchester.—November 2 city will vote on \$65,000 of 4 per cent. 20-year sewer bonds.

La., Mansfield.—Bids are being received for \$70,000 of 5 per cent. 10-year road construction certificates of De Soto parish. Address J. W. Parsons.

Miss., Ackerman.—Bids are being received for \$35,000 of 6 per cent. electric-light and water-works-plant bonds. J. M. Harris is City Clerk.

Miss., Benoit.—Bids will be received until November 2 for \$10,000 of 5 per cent. water-works bonds. Address M. M. Thompson, Mayor.

Miss., Cleveland.—F. L. Fuller & Co. of Cleveland are reported to have been awarded \$15,000 of 6 per cent. 20-year water-works bonds at 103.

Miss., Kilmichael.—J. H. Townsend of Kilmichael and E. L. Lay of Winona are reported to have purchased at \$120 premium \$6000 of school-building bonds.

Miss., Vicksburg.—The Board of Supervisors of Warren county has authorized the issuing of \$34,000 of county convict farm bonds.

Mo., Lathrop.—The \$7500 of electric-light bonds are reported to have been defeated.

N. C., Reidsville.—Voted: \$100,000 of sewer, light, water and sidewalk bonds.

N. C., Tarboro.—C. E. Denton & Co. of Cleveland is reported to have purchased at \$911 premium \$35,000 of 5 per cent. 30-year school-building bonds.

Okla., Durant.—The \$50,000 of 5 per cent. 20-year improvement bonds recently voted and sold have been declared invalid, and it is stated a new election will be held October 19.

Okla., Enid.—Reports state that bids are soon to be asked for \$32,000 of refunding bonds.

Okla., Grandfield.—Voted: \$28,000 of water-works bonds.

Okla., Oklahoma City.—Bids will be received until 5 P. M. October 25 by Bob Parman, City Clerk, for \$185,000 of sewer bonds; interest on 4% and 5 per cent. basis.

Okla., Pryor Creek.—Voted: \$90,000 of water and sewer system bonds.

Okla., Sapulpa.—October 16 an election is to be held to vote on \$250,000 of water-works, \$50,000 of sewer and \$15,000 of fire-protection bonds.

Okla., Tahlequah.—Cherokee county contemplates issuing road bonds. John H. Pitchford is District Judge.

Okla., Wewoka.—Reported voted: \$60,000 of electric-light, water-works and sewerage bonds.

Okla., Woodward.—Voted: Bonds for water-works.

Okla., Woodward.—The \$70,000 of 5 per cent. 25-year school-building bonds were purchased by the Oklahoma Bond & Trust Co. of Guthrie at 100.27.

S. C., Newberry.—November 2 an election is to be held to vote on \$35,000 of sewer-extension and \$5000 of water-extension bonds. J. J. Langford is Mayor, and O. L. Buzhardt, clerk and treasurer.

Tenn., Chattanooga.—Bids will be received by S. M. Walker, County Judge, or A. J. Gahagan, chairman of Finance Committee, until noon October 20 for \$150,000 of 4½ per cent. Hamilton county school bonds.

Tenn., Gainesboro.—An election is to be held in Jackson county December 11 to vote on \$75,000 of 5 per cent. bonds in aid of the Alabama, Tennessee & Kentucky Railroad Co.

Tenn., Memphis.—The Bank of Commerce & Trust Co. has purchased at \$13,118.88 premium \$58,000 of 6 per cent. street-improvement bonds. New bids for the \$425,000 of 4 per cent. street-improvement bonds will be received until noon October 11. James H. Malone is Mayor.

Tenn., Carthage.—An election is to be held February 25 to vote on \$100,000 of Smith county road bonds.

Tenn., Ooltewah.—A New York banking house is reported to have purchased \$10,000 of James county school bonds.

Tex., Anahuac.—Chambers county is reported to have voted \$65,000 of road bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$12,000 of 5 per cent. 10-20-year Palmer independent school district schoolhouse bonds; \$30,000 of

5 per cent. 20-40-year Longview street-improvement bonds; \$1996 5 per cent. 20-40-year Longview water-works repair bonds; \$30,000 of 5 per cent. water-works bonds of Athens; \$1500 of 5 per cent. 10-20-year bonds of Palo Pinto county common school district No. 26; \$3000 of 5 per cent. 10-30-year Grand Saline independent school district bonds; \$12,000 of 5 per cent. 10-40-year Palmer independent school district bonds; \$10,000 of Luling school-building bonds.

Tex., Anson.—Jones county has voted \$100,000 of 5 per cent. Jones county bonds, and bids for same will be opened December 15. Jas. P. Stinson is County Judge.

Tex., Bay City.—Defeated: \$20,000 of Matagorda county jail bonds.

Tex., Brownwood.—Reports state that the election to vote on \$20,000 of water and street-improvement bonds is to be held October 18.

Tex., Cameron.—An election is to be held in Milam county October 12 to vote on \$40,000 of 5 per cent. 40-year road bonds.

Tex., Claude.—Defeated: \$55,000 of Armstrong county courthouse bonds.

Tex., Corpus Christi.—Voted: \$152,000 of sewer bonds.

Tex., Corsicana.—Reports state that \$16,000 of 5 per cent. Navarro county school bonds have been purchased by the Texas Trust Co. of Houston.

Tex., Cuero.—Bids will be received until November 1 for \$17,000 of 5 per cent. 15-30-year refunding and \$17,000 of 5 per cent. 15-40-year water-works improvement bonds. J. C. Woodworth is Mayor.

Tex., Dayton.—Bids will be received by J. B. Sterling, president Board of Trustees, until October 15 for \$10,000 of 5 per cent. 10-40-year school-building bonds.

Tex., Eldorado.—Bids are being received for \$20,000 of 5 per cent. 5-40-year school district bonds. Address J. B. Christian, secretary School Board.

Tex., Ennis.—Voted: \$12,000 of additional water-works bonds.

Tex., Fort Worth.—The election held August 19 to vote on \$450,000 of water, sewer and light; \$135,000 of street-improvement and \$65,000 of police and fire-department bonds has been declared illegal, and it is stated another vote will be taken.

Tex., Hamlin.—Voted: Jones county courthouse building bonds.

Tex., Hidalgo.—The State Permanent School Fund is reported to have purchased on a 4½ per cent. basis \$50,000 of 5 per cent. 10-40-year Hidalgo county road and bridge bonds.

Tex., Houston.—The Texas Trust Co. has purchased \$10,000 of 5 per cent. Harris county school bonds.

Tex., Jacksonville.—J. H. Causey & Co. of Denver, Col., are reported to have purchased \$25,000 of school bonds.

Tex., Livingston.—Voted: \$25,000 of Livingston county high-school building bonds.

Tex., Lockhart.—Caldwell county will sell at private sale \$50,000 of 5 per cent. 40-year bonds of Road District No. 1. Geo. W. Kyser is County Judge. A later report states that the bonds have been purchased by the Texas Trust Co. of Houston, Tex.

Tex., Waco.—City is reported to have sold \$75,000 of street and bridge, \$25,000 of fire-station and equipment, and \$100,000 of funding debt 5 per cent. 30-year bonds at a premium of \$15,725 to Seaboard & Mayer of Cincinnati.

Tex., Wallisville.—Reported voted: \$65,000 of Chambers county road bonds.

Va., Clarendon.—October 18 Alexandria county will vote on \$250,000 of road bonds. E. W. Ball is treasurer.

Va., Martinsville.—Voted: \$35,000 of 5 per cent. bonds for school, town and new dam on Smith's River. A. S. Gravelly is clerk of Council.

W. Va., Clarksburg.—Bids will be received on November 5 for \$270,000 of 4½ per cent. city improvement bonds. Frank R. Moore is Mayor and Will H. Cole City Clerk.

W. Va., Keyser.—An election is to be held October 19 to vote on \$16,500 of 5 per cent. water-works bonds. R. A. Welch is Mayor.

W. Va., Middlebourne.—Reported voted: \$7000 of 6 per cent. 10-year bonds.

W. Va., Morgantown.—Defeated: \$35,000 of city hall and sewer bonds.

At Clarksburg, W. Va., bids will be received on November 5 for \$270,000 of 4½ per cent. city bonds. Further particulars will be found in the advertising columns.

At Cuero, Tex., bids will be received until November 1 for \$17,000 of refunding and \$17,000 of water-works improvement bonds. Further particulars will be found in the advertising columns.

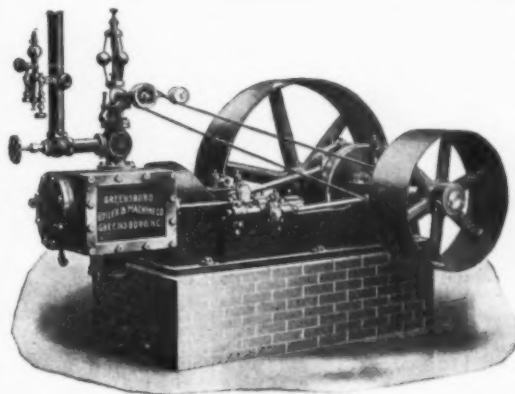
## FINANCIAL NOTES.

Citizens' Bank & Trust Co., Tampa, Fla., John Trice, president, will increase the capital stock from the present figure, \$200,000, to \$250,000, and the surplus will also be increased by \$50,000 to an equal amount.

A condensed statement of 484 banks and bank and trust companies in Texas at close of business September 1, 1909, shows loans,

personal, collateral and real estate, \$35,430,108; due from other banks, \$12,022,880; cash items, currency and specie, \$4,196,595; capital stock paid in, \$14,839,000; surplus fund, \$1,354,935; undivided profits, \$1,040,903; due to other banks, \$4,165,899; total deposits, \$32,701,849; total resources, \$58,026,743.

The Farmers and Merchants' Bank of Spring Hope, N. C., is reported to have increased its capital from \$10,000 to \$15,000.



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All Sizes and Styles.

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Only ten minutes' ride to the business section and all steamboat lines.

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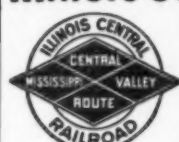
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NEW ORLEANS, LA.  
MEMPHIS, TENN.  
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Through excursion sleeping car service between Chicago and between Cincinnati

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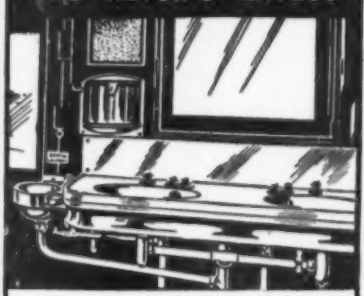
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Does away with the ugly habit in sleeping cars of people cleaning their teeth in the regular lavatories. The new Pullman equipment of the Chicago & Alton Railroad has a neat little dental lavatory. The water has the chill removed. A rinsing apparatus for automatically cleansing the bowl is also a feature. Separate water glasses are provided.

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